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GEOLOGICAL, GEOCHEMICAL & GEOPHYSICAL REPORT

ON THE

MITZI PROPERTY

Mitzi 1, 2, Mitze 3, 4 Claims

OMINECA MINING DIVISION

N.T.S. 93 N/01

Latitude: 55° 06'
Longitude: 124° 25'

Work Performed from May 15 to July 15, 1990

NORANDA EXPLORATION COMPANY, LIMITED
(NO PERSONAL LIABILITY)

GEOLOGICAL BRANCH
ASSESSMENT REPORT

20,383

REPORT BY: TERRY WALKER
TED WONG

OCTOBER, 1990

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SUMMARY

The Mitzi claim group was optioned from Richard Haslinger in the winter of 1989 to investigate their potential to host an alkali - porphyry type bulk tonnage Cu - Au deposit within and/or adjacent to intrusive bodies suggested by regional airborne magnetics and geology.

Noranda's surveys to date have identified several dioritic to syenodioritic intrusives within aphyllitic to weakly potassic altered trachyte sequence. One of the intrusives has a strong coincident Cu - Au soil anomaly and an extensive IP chargeability zone developed along its flank.

INTRODUCTION

The Mitzi claim group was optioned from Richard Haslinger during the winter of 1988-89. The claims are located along the south shore of Witch lake approximately 180 km northwest of Prince George.

Noranda's activities to date have focused on exploration for bulk tonnage Cu - Au porphyry deposits and higher grade Cu - Au skarn deposits. These efforts have included geological mapping, soil geochemistry, ground magnetics and IP surveys.

LOCATION & ACCESS

The Mitzi claim group is located at the south eastern end of Witch Lake, approximately 180 km northwest of Prince George, B.C.

Access to the property can be gained by either float plane or helicopter out of Fort St James. There are currently several helipads on the property. There is also a very rough ATV road that goes from the east end of Witch Lake to Chuchi Lake (Figures 1 and 2).

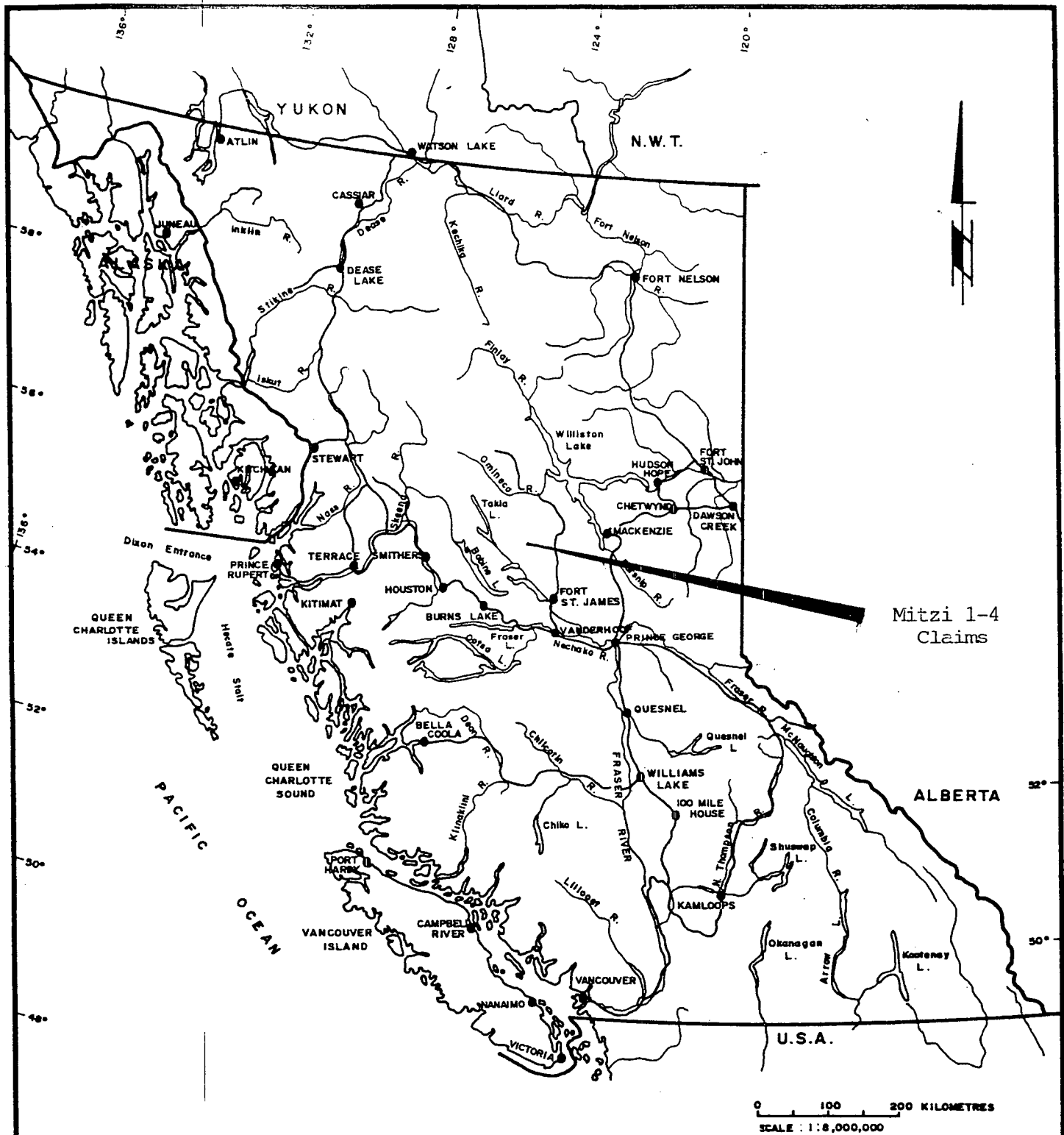
CLAIM STATISTICS

<u>NAME</u>	<u>RECORD #</u>	<u>UNITS</u>	<u>RECORD DATE</u>	<u>OWNER</u>
Mitzi 1	8545	20	July 15, 1987	R. Haslinger
Mitzi 2	8546	20	July 15, 1987	R. Haslinger
Mitze 3	10166	20	Feb. 13, 1989	R. Haslinger
Mitze 4	10167	20	Feb. 13, 1989	R. Haslinger

TOPOGRAPHY & VEGETATION

The bulk of the area is characterized by moderate relief rounded hills with outcrop ridges and knobs and low swampy valleys. Elevations range from 917 metres on Witch Lake to 1300 metres. The NE quadrant of the property is however low rolling glacial outwash, esker ridges, pine flats and swamp.

Vegetation consists of mature stands of spruce, pine and balsam. Undergrowth is mainly alders, willows and devil's club.

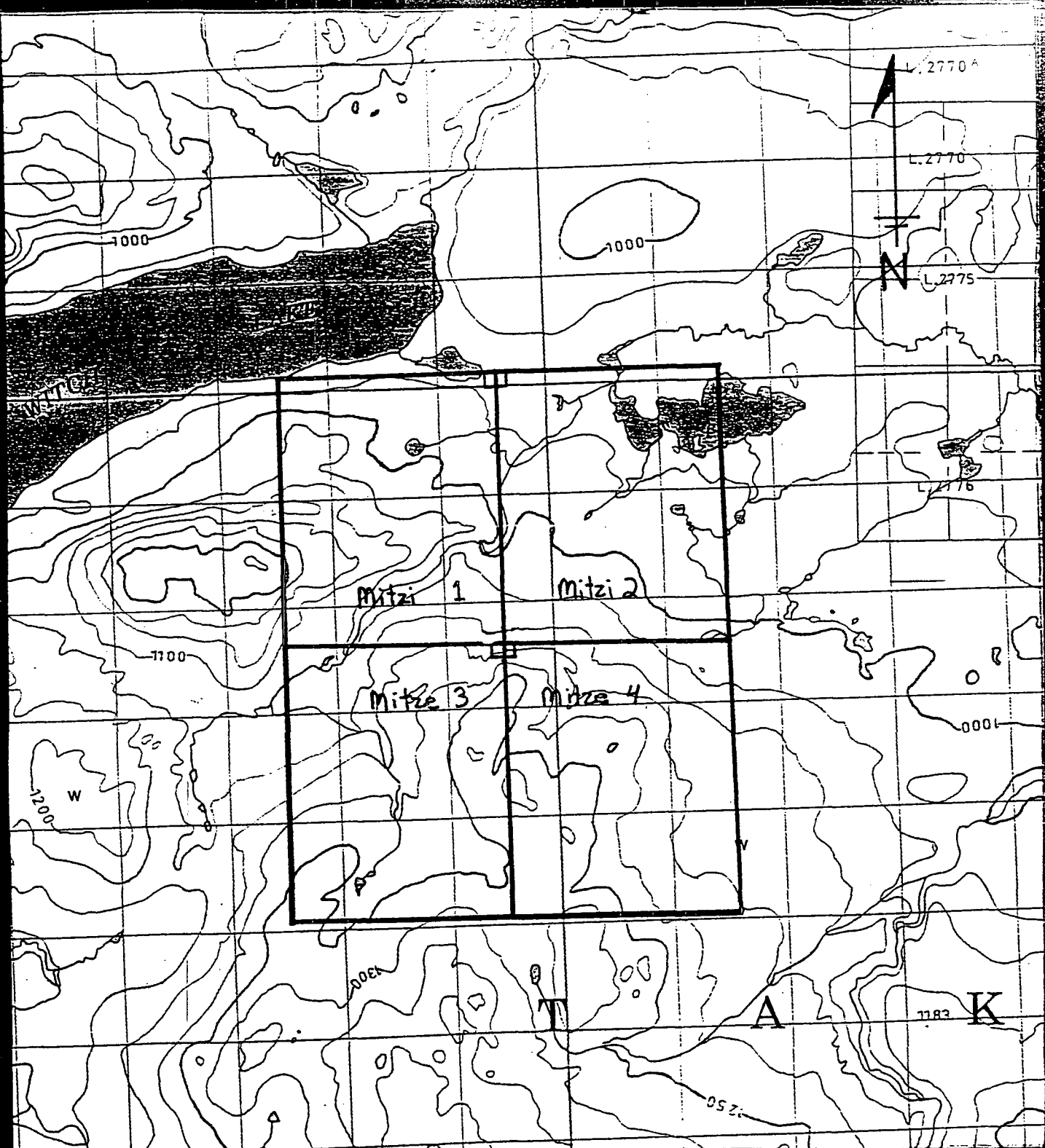


Mitzi 1-4 Claims

0 100 200 KILOMETRES
SCALE : 1:6,000,000

REVISED	MITZI 1 -4 Claims	
	LOCATION MAP	
PROJ.No. 285	SURVEY BY: T. Walker	DATE: Oct. 1990
N.T.S. 93 N/7	DRAWN BY: S.K.B.	SCALE: 1:6,000,000
DWG.No.	NORANDA EXPLORATION	
1	OFFICE: PRINCE GEORGE, B.C.	

VANCAL 11927



REVISED	MITZI 1-4 Claims	
	Location Map	
PROJ. No. 285	SURVEY BY: T. Walker	DATE: Oct. 1990
N.T.S. 93 N/1	DRAWN BY: F. Stewart	SCALE: 1 : 50000
DWG. No.	NORANDA EXPLORATION	
2	OFFICE: Prince George	

PREVIOUS WORK

- pre 1960 Discovery of Ted Taylor showing
- 1965-68 Regional work by Noranda Exploration
- 1971 Ambassador Mines Ltd. of Vancouver, B.C., completed a soil grid, magnetometer and seismic survey in the area around the Ted Taylor showing.
- 1987 Staked by R. Haslinger
- 1988 Placer Dome Inc. performed a recon. examination of the Ted Taylor showing. They collected 3 lines of soil samples and took a number of rock samples.
- 1989-90 Noranda Exploration, soil geochemistry, geological mapping, prospecting, ground magnetics and IP surveys.

REGIONAL GEOLOGY

The area has most recently been described by J. E. Armstrong in G.S.C. Memoir 252, 1949, Fort St. James Map-Area. The area is also covered by G.S.C. Map 971A by H. M. A. Rice, 1949 (Geology of Smithers - Fort St. James Area).

The Mitzi property lies in a broad northwest trending package of rocks known as the Quesnel Trough. These include Upper Triassic to Lower Jurassic Takla Group volcanics and sediments which have been intruded by a series of felsic to ultramafic stocks and batholiths, ranging in age from Upper Triassic to Lower Cretaceous.

The Takla group volcanics and sediments include andesitic to basaltic flows, tuffs, tuff breccia and agglomerates interbedded with conglomerates, greywacke, shales and limestones. The intrusive rocks include the Hogem batholith and several other Omineca intrusions consisting of granite, syenite, granodiorite, quartz diorite, diorite, gabbro and pyroxenite.

The area is cut by numerous fault structures commonly trending northwest, parallel to the Pinchi Fault. Complimentary N - S, NE - SW, and E - W faults and fracture sets are also locally well developed.

Recent exploration in the Quesnel Trough has focused on several bulk tonnage Cu-Au prospects. The most notable to date is the Mount Milligan project with published geological reserves of 386 million tons grading 0.21% Cu and 0.016 opt Au.

The Mount Milligan MBX Zone is situated on the flanks of a strong, isolated magnetic feature. The Mitzi property covers a very similar magnetic feature (Figure 3).

PROPERTY GEOLOGY

The property is underlain by a thick sequence of porphyritic trachyte to andesite flows which have been intruded by diorite to syenodiorite plugs and small stocks.

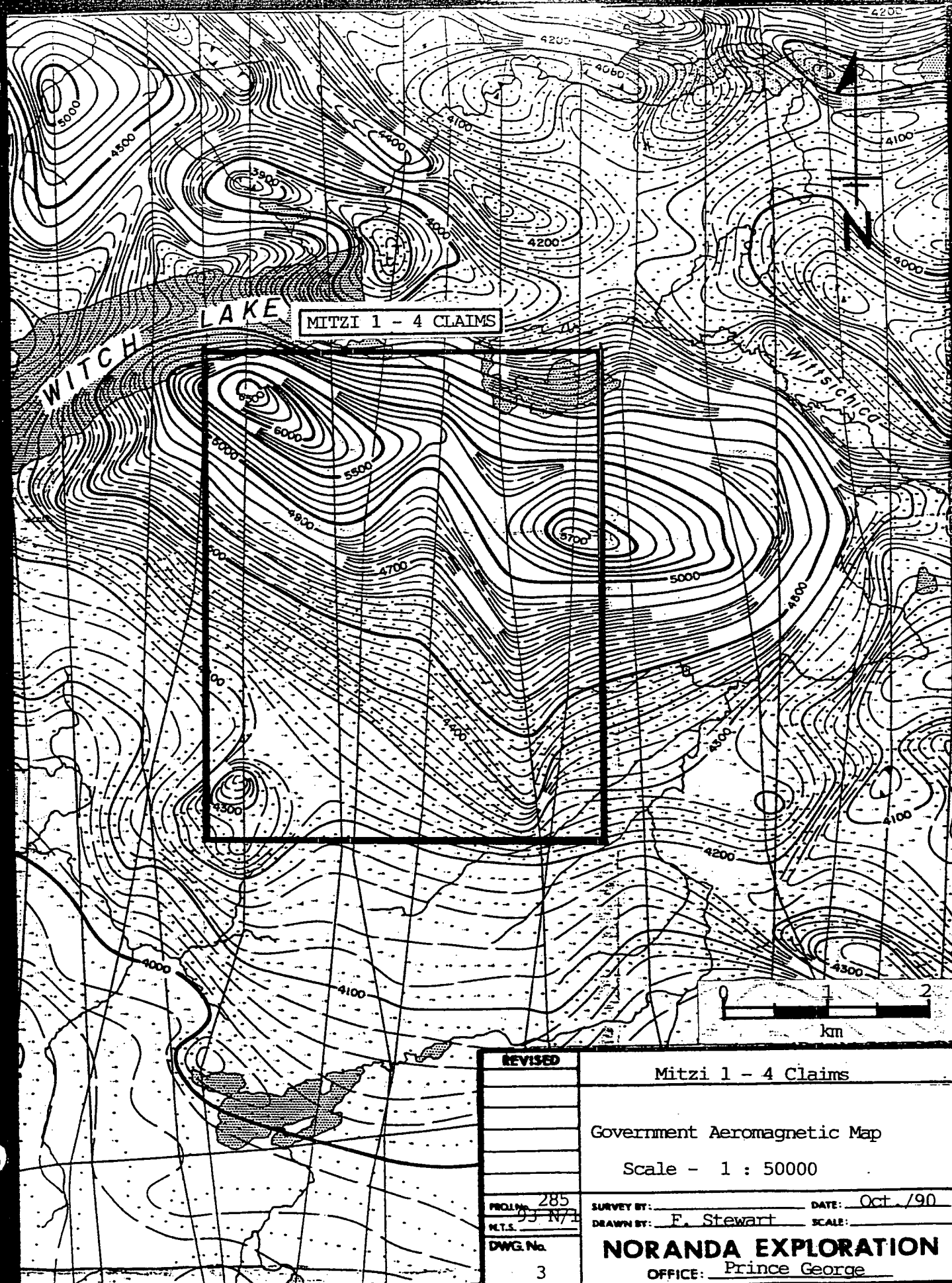
The trachyte flows are pale to medium gray, very fine grained, flinty porphyritic rocks which are locally highly vesicular and carbonate rich. These flows are best exposed in the Taylor Creek valley which bisects the Mitzi 1 and 2 claims (Figure 4).

The more andesitic flows are darker, massive, blocky to columnar jointed rocks which characteristically contain well developed augite and feldspar phenocrysts in a fine grained matrix. Compositional zoning between augite and feldspar is the only significant lithological change within these rocks.

The flow rocks have been intruded by several plugs of medium grained diorite to syenodiorite on the Mitzi 1 claim. The best exposed intrusive is an equigranular massive hornblende and magnetite rich rock underlying the low hill on the south shore of Witch Lake. This intrusion is the cause of the northern most magnetic high on the regional airborne survey (Figure 3).

The only other intrusive outcrop is a coarser grained more leucocratic hornblende, biotite syenodiorite exposed along the north side of Taylor Creek on the Mitzi 1 & 2 claim boundary.

Ground magnetics suggest this body underlies a fairly extensive area of Mitzi 1 north of the creek and may in fact join up with the diorite on Witch Lake.



REVISED	Mitzi 1 - 4 Claims	
	Government Aeromagnetic Map	
	Scale - 1 : 50000	
PROJ. No. 285	SURVEY BY: _____	DATE: Oct /90
N.T.S. 03 N/1	DRAWN BY: F. Stewart	SCALE: _____
DWG. No. 3	NORANDA EXPLORATION	
	OFFICE: Prince George	

MINERALIZATION and ALTERATION

Disseminated py and/or po in concentrations up to 1% is common within the trachyte flows and is commonly associated with epidote, chlorite and carbonate alteration. This propylitic suite is prominently developed along both flanks of the Taylor Creek valley where sulphide content in the sparse outcrop often exceeds 5% and locally includes cpy. The high sulphide areas are also weakly to moderately potassic altered and locally contain disseminated magnetite. The strongest development of potassic alteration noted to date in outcrop occurs at the south end of lines 79,200E - 80,800E. Rock samples from this area are highly anomalous in Cu and Au.

In the Taylor Creek valley between lines 79,800E and 80,000E calc-silicate, pyroxene and garnet skarn lenses are developed in trachytes at and close to their contact with the syenodiorite intrusive. Sulphide mineralization in the skarn consists of local pockets and veinlets of massive po + cpy, py and quartz in garnet pyroxene skarn. The best mineralized skarn section occurs at the Taylor showing and has returned grab sample assays of up to 1.59% Cu + 0.144 opt Au.

GEOCHEMISTRY

Methods:

The 1990 soil survey consisted of an extension of the 1989 grid between lines 79,800E and 80,800E south of baseline 80,000N to 78,500N and check sampling of several 1989 lines.

"B" horizon samples were collected at 50 m intervals along the 200 m spaced N - S lines at depths varying from 25 - 75 cm. All samples were shipped to Vancouver and analyzed for 30 element ICP by Acme Analytical and Au AA by Noranda. Sample preparation and analytical methods are described in Appendix III. Cu and Au values are presented on grid maps (Figs. 5 & 6) and in the case of Cu contoured.

Results:

A number of strong E - W elongate Cu + Au anomalies were detected on the northern slope of the hill south of Taylor Creek. These anomalies generally overlie altered trachytes and at several places include outcrop areas which assayed up to 4,336 ppm Cu + 300 ppb Au. It is therefore assumed that these anomalies reflect Cu - Au mineralization in the underlying bedrock.

In addition to the soil surveys, a number of rock samples were collected from mineralized outcrop throughout the grid. The majority of these returned Cu values form 100 to 350 ppm with spot highs over 4000 ppm. No other elements are systematically enriched in the rocks but Ag, Zn, As, Cd and Au are locally enhanced.

GEOPHYSICS

Methods:

The geophysical surveys conducted during the report period include 51.3 line km of ground magnetics and 12.0 line km of dipole - dipole IP/Resistivity.

The magnetic survey covered the bulk of the Mitzi 1 & 2 claims and the northern third of the Mitze 3 & 4 claims. Lines were run N - S every 200 m and readings were taken at 12.5 m intervals. Noranda personnel collected the data using an IGS/MP-3 system and were responsible for the total field contour plot (Figure 8).

The IP/Resistivity survey was contracted to Pacific Geophysics, Vancouver and covered the area between lines 79,200E and 82,000E south of baseline 80,000N. Lines, for the most part, were run at 400 m E - W spacing and a 50 m 'a' spacing. Sections of lines 79,200E, 79600E, 78,800E and 80,000E were run using a 25 m 'a' spacing for better definition over the Taylor Showing. An IP6 receiver was used to collect the data and the results plotted as a series of pseudo-sections (Appendix V).

Results: (i) Magnetics

A number of strong magnetic highs were picked up which occupy a NW - SE trending belt across the middle of the claim group. The most intense anomaly is a large NW - SE elongate high contrast feature centred on the NW edge of Mitzi 1. This feature closely over lies magnetite bearing diorite. On the opposite end of the trend is a slightly less intense similarly elongate high with a central low and highly variable gradient.

Between the two are a number of smaller discreet highs within a relatively high background magnetic plateau. At the centre of this plateau are the outcrops of syenodiorite and skarn in Taylor Creek. A steep gradient roughly E - W linear magnetic break appears to coincide with the southern margin of this

intrusion. Local shearing and fracturing in outcrop along the creek in this area suggests this may be a structural feature.

Other anomalies of note include the bullseye anomaly north or the baseline between lines 79,200E and 79,600E and a similar but less intense anomaly at the south end of line 79,400E. Local outcrops on the flanks of both anomalies contain heavy py, po, tr cpy mineralization in propylitic to weakly potassic alteration trachytes.

(ii) IP/Resistivity

Strong IP chargeability anomalies were detected on all the surveyed lines. The largest is an arcuate belt of moderate to strong responses 300 to 800 m wide which trends NE from the south end of line 79,200E to line 80,800E then swings SE along the flank of the second most prominent magnetic high to line 82,400E. The western half of this anomaly coincides with the strong Cu, Au soil values and propylitically altered py, po, cpy mineralized trachyte.

The other significant chargeability trend is much narrower and directly over lies the trace of the Taylor Creek skarn horizon between 79,200E and 80,000E. This horizon may also have been detected just north of the 80,00 N baseline on line 81,200E where a narrow discrete anomaly of similar character occurs.

CONCLUSIONS

The limited surveys described above have partially outlined a large coincident IP - soil Cu, Au geochemical zone within altered, mineralized trachytic volcanics on the west and southwest flanks of a large magnetic anomaly. This scenario is interpreted to signify the local presence of a large Cu, Au porphyry system developed on the southwest flank of a buried intrusion. This system is still open and requires further definition.

The Taylor Creek skarn horizon has been traced for at least 800 m along strike and is still open in both directions. Although relatively narrow on most lines it does appear to be thickening to the west and hence also requires more definition.

RECOMMENDATIONS

Additional soil geochemistry, IP surveys and reconnaissance drilling are recommended to trace the main anomaly zone to the southeast and explore the true inter-relationships of the anomalies.

REFERENCES

Garnet, J.A., 1978: Geology and Mineral Occurrences of the Southern Hogem Batholith.

Montgomery, J.H., 1971: Geochemical and Geophysical report on the King group of claims on behalf of Ambassador Mines Ltd. BCDM Assmt. Rpt. #3406.

Paterson, I.A., 1974: G.S.C. Paper 74-1, Part B.

Price, S., 1988: A reconnaissance geochemical report on the Mitzi 1 and 2 claims. Placer Dome Inc. BCDM Assmt. Rpt. #17793.

APPENDIX I
 STATEMENT OF COSTS

GEOLOGICAL SURVEY:

Wages - Geologist, 6 days @ \$225/day	\$ 1,350.00
- Assistant, 6 days @ \$145/day	\$ 870.00
Food & Accommodation - 12 mandays @ \$35/day	\$ 420.00
Transportation - truck, 7 mandays @ \$50/day	\$ 350.00
- helicopter, 0.3 hr @ \$705	\$ 212.00
Misc. Supplies	\$ 377.00
Sub-Total:	\$ 3,579.00

GEOCHEMICAL SURVEY:

Wages - Samplers, 10 mandays @ \$130/day	\$ 1,300.00
Food & Accommodation - 10 mandays @ \$35/day	\$ 350.00
Transportation - truck, 5 mandays @ \$50/day	\$ 250.00
- helicopter, 0.3 hr @ \$705	\$ 212.00
Analysis - soils, 239 @ \$13.50/sample	\$ 3,226.50
- rocks, 28 @ \$14.50/sample	\$ 406.00
Misc. supplies and freight	\$ 632.00
Sub-Total:	\$ 6,376.50

GRID PREPARATION:

Linecutting (15 km) - wages, 34 md @ \$125/day	\$ 4,250.00
Hipchain/blaze (65 km) - wages, 45 md @ \$110/day	\$ 4,950.00
Food & Accommodation - 79 mandays @ \$35/day	\$ 2,765.00
Transportation - 1 ATV, 20 days @ \$25/day	\$ 500.00
- truck, 20 day @ \$50/day	\$ 1,000.00
- helicopter, 0.8 hr @ \$705	\$ 564.00
Misc. supplies	\$ 689.00
Sub-Total	\$ 14,718.00

GEOPHYSICS:

IP Contractor - 12 km @ \$1275/km	\$ 15,300.00
Food & Accommodation - 48 mandays @ \$35/day	\$ 1,680.00
Transportation - helicopter, 1.5 hr @ \$705	\$ 1,057.50
Mag Survey - 51.3 km @ \$75/km	\$ 3,847.50
Food & Accommodation - 10 mandays @ \$35/day	\$ 350.00
Equipment rental	\$ 2,150.00
Transportation - truck, 5 days @ \$50/day	\$ 250.00
- helicopter, 0.6 hr @ \$705	\$ 423.00
- fixed wing	\$ 830.00
Misc. supplies and freight	\$ 450.00
Sub-Total:	\$ 26,338.00

REPORT PREPARATION:

Wages - Geologist, 4 days @ \$225/day	\$ 900.00
- Geophysicist, 2 days @ \$150/day	\$ 300.00
- Drafting, 3 days @ \$130/day	\$ 390.00
- Typing, 1 day @ \$125/day	\$ 125.00
Sub-Total:	\$ 1,715.00

TOTAL STATEMENT OF COSTS: \$ 52,726.50

APPENDIX II

STATEMENT OF QUALIFICATIONS

STATEMENT OF QUALIFICATIONS

I, Terence Walker, of Saskatoon, Saskatchewan, hereby certify that:

1. I am a graduate of University College, London with a B.Sc. degree in Geology (1968) and a graduate of McGill University, Montreal with an M.Sc. in Mineral Exploration (1978).
2. I have practiced my profession with various mining companies in Europe and North America since graduation.
3. I am currently employed as a contract Geologist working for Noranda Exploration Company, Limited.
4. I am a member of the Canadian Institute of Mining and Metallurgy, the Geological Association of Canada, the Prospectors and Developers Associations and the British Columbia and Yukon Chamber of Mines.
5. The information contained in this report is based on published and unpublished reports on the property and surrounding area, and on work done by Noranda since 1988.
6. I have no current interest in the property.

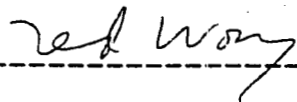


Terence Walker
Consulting Geologist
Walker Geological Services Inc.

STATEMENT OF QUALIFICATIONS

I, Ted Wong, of the City of Vancouver, Province of British Columbia, hereby certify that:

1. I am a geophysicist residing in Burnaby, B.C.
2. I have graduated from the University of British Columbia in 1983 with a B.Sc. in Geophysics.
3. I am a professional geophysicist, registered with the Association of Professional Engineers, Geologists and Geophysicists of Alberta. I am a licensed professional geophysicist, registered with the Association of Professional Engineers, Geologists and Geophysicists of the Northwest Territories.
4. I have practised by profession on a continual basis since 1984.
5. I have been employed by Noranda Exploration Company, Limited since September, 1989.

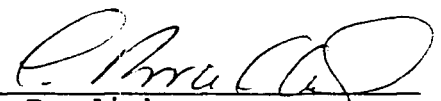


Ted T. Wong, P. Geoph.

STATEMENT OF QUALIFICATIONS

I, Lyndon Bradish of Vancouver, Province of British Columbia, do hereby certify that:

1. I am a Geophysicist residing at 1826 Trutch Street, Vancouver, B.C.
2. I am a graduate of the University of British Columbia with a B.Sc. (geophysics).
3. I am a member in good standing in the Society of Exploration Geophysicists, European Association of Exploration Geophysicists and the Prospector's and Developer's Association.
4. I presently hold the position of Regional Geophysicist with Noranda Exploration Company, Limited and have been in their employ since 1973.


L. Bradish.

APPENDIX III

ANALYTICAL PROCEDURE

ANALYTICAL METHOD

DESCRIPTIONS FOR GEOCHEMICAL ASSESSMENT REPORTS

The methods listed are presently applied to analyse geological materials by the Noranda Geochemical Laboratory at Vancouver. (March, 1984).

Preparation of Samples

Sediments and soils are dried at approximately 80°C and sieved with a 80 mesh nylon screen. The -80 mesh (0.18 mm) fraction is used for analysis.

Rock specimens are pulverized to -120 mesh (0.13 mm). Heavy mineral fractions (panned samples) are analysed in its entirety, when it is to be determined for gold without further sample preparation. See addendum.

Analysis of Samples

Decomposition of a 0.200 g sample is done with concentrated perchloric and nitric acid (3:1), digested for 5 hours at reflux temperature. Pulps of rock or core are weighed out at 0.2 g or less depending on the matrix of the rock, and twice as much acid is used for decomposition than that is used for silt or soil.

The concentrations of Ag, Cd, Co, Cu, Fe, Mn, Mo, Ni, Pb, V and Zn (all from the group A elements of the fee schedule) can be determined directly from the digest (dissolution) with an atomic absorption spectrometer (AA). A Varian-Techtron Model AA-5 or Model AA-475 is used to measure elemental concentrations.

Elements Requiring Specific Decomposition Method

Antimony - Sb: 0.2 g sample is attacked with 3.3 mL of 6% tartaric acid, 1.5 mL conc. hydrochloric acid and 0.5 mL of conc. nitric acid, then heated in a water bath for 3 hours at 95°C. Sb is determined directly from the acid solution with an AA-475 equipped with electrodeless discharge lamp (EDL).

Arsenic - As: 0.2 - 0.4 g sample is digested with 1.5 mL of 70% perchloric acid and 0.5 mL of conc. nitric acid. A Varian AA-475 equipped with an As-EDL measures the arsenic concentration of the digest.

Barium - Ba: 0.1 g sample is decomposed with conc. perchloric, nitric and hydrofluoric acid. Atomic absorption using a nitrous oxide-acetylene flame determines Ba from the aqueous solution.

Bismuth - Bi: 0.2 g - 0.3 g is digested with 2.0 mL of perchloric 70% and 1.0 mL of conc. nitric acid. Bismuth is determined directly from the digest into the flame of the AA instrument c/w EDL.

Gold - Au: 10.0 g sample (Pan-concentrates see below) is digested with aqua regia (1 part nitric and 3 parts hydrochloric acid). Gold is extracted with Methyl iso-Butyl ketone (MIBK) from the aqueous solution. Gold is determined from the MIBK solution with flame AA.

Magnesium - Mg: 0.05 g - 0.10 g sample is digested with 4 mL perchloric/nitric acid (3:1). An aliquot is taken to reduce the concentration to within the range of atomic absorption. The AA-475 with a nitrous oxide flame determines Mg from the aqueous solution.

Tungsten - W: 1.0 g sample sintered with a carbonate flux and thereafter leached with water. The leachate is treated with potassium thiocyanate. The yellow tungsten thiocyanate is extracted into tri-n-butyl phosphate. This permits colourimetric comparison with standards to measure tungsten concentration.

Uranium - U: An aliquot, taken from a perchloric-nitric (3:1) decomposition, usually from the multi-element digestion, is diluted with water and a phosphate buffer. This solution is exposed to laser light, and the luminescence of the uranyl ion is quantitatively measured on the UA-3 (Scintrex).

LOWEST VALUES REPORTED IN PPM

Ag - 0.2	Mn - 20	Zn - 1	Au - 0.1 (10 ppb)
Cd - 0.2	Mo - 1	Sb - 1	W - 2
Co - 1	Ni - 1	As - 1	U - 0.1
Cu - 1	Pb - 1	Ba - 10	
Fe - 100	V - 10	Bi - 1	

APPENDIX IV

ANALYTICAL RESULTS

ASSAY CERTIFICATE

Mitzi / Eagle (Be)

1/2017
Assay Results

Noranda Exploration Co. Ltd. PROJECT 90082040-282/285

File # 90-3254

P.O. Box 2380, 1050 Davie, Vancouver BC V6B 3T5

SAMPLE#	Mo %	Cu %	Pb %	Zn %	Ag oz/t	Ni %	Co %	Mn %	Fe %	As %	U %	Th %	Cd %	Sb %	Bi %	Au oz/t
R 129501	.001	.25	.01	.01	.02	.01	.01	.04	6.13	.01	.01	.01	.01	.01	.01	.001
R 129502	.001	.18	.01	.01	.01	.01	.01	.04	3.54	.01	.01	.01	.01	.01	.01	.001
R 129503	.001	.13	.01	.01	.01	.01	.01	.05	4.84	.01	.01	.01	.01	.01	.01	.001
R 129504	.001	.02	.01	.01	.01	.01	.01	.03	4.45	.01	.01	.01	.01	.01	.01	.001
R 129505	.001	.26	.01	.01	.01	.03	.01	.02	4.65	.01	.01	.01	.01	.01	.01	.002
R 129506	.001	.11	.01	.01	.01	.01	.01	.05	8.27	.01	.01	.01	.01	.01	.01	.001
R 129507	.001	.02	.01	.01	.01	.01	.01	.05	4.44	.01	.01	.01	.01	.01	.01	.001

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Tl %	B ppm	Al %	Na %	K %	W ppm	Au* ppb
46481	2	101	3	25	.1	66	19	314	2.68	5	5	ND	2	47	.7	2	2	56	1.78	.129	8	84	1.07	46	.15	8	1.56	.04	.25	1	2
46482	4	147	7	18	.1	107	23	155	2.67	2	5	ND	1	105	.4	2	2	46	1.44	.182	9	109	.68	95	.15	2	1.38	.11	.29	1	4
46483	2	198	7	20	.1	36	10	285	2.57	2	5	ND	3	26	.5	2	2	38	2.34	.132	12	87	.93	13	.11	8	2.13	.02	.04	1	3
46484	3	37	7	34	.1	48	11	332	2.31	7	5	ND	2	45	.6	2	2	59	2.18	.174	8	116	1.52	62	.18	13	2.19	.03	.26	1	9
46485	1	114	7	39	.1	46	13	515	2.93	14	5	ND	3	34	.9	2	2	49	3.63	.138	9	97	1.26	17	.16	12	2.16	.03	.08	1	1
46486	1	20	11	68	.1	78	15	788	3.28	7	5	ND	3	34	.6	2	2	55	4.07	.135	6	125	1.92	23	.13	12	3.31	.02	.13	1	3
46487	1	126	6	42	.1	72	16	505	3.95	7	5	ND	3	32	.8	2	2	73	1.89	.148	9	142	2.00	27	.16	9	2.79	.03	.31	1	7
46488	1	135	11	45	.1	13	19	396	4.64	2	5	ND	1	52	.8	2	2	120	1.14	.128	6	12	1.41	142	.22	2	2.18	.08	.81	1	3
46489	2	323	10	38	.1	42	23	473	4.99	8	5	ND	1	35	.8	2	2	80	2.62	.236	7	70	1.08	43	.17	8	2.47	.06	.19	1	4
46490	1	263	9	44	.1	21	22	326	6.24	8	5	ND	1	143	1.4	2	2	131	2.33	.128	4	33	.65	77	.15	2	3.57	.21	.24	1	14
46491	1	121	2	26	.1	15	12	249	2.92	2	5	ND	1	80	.9	2	2	82	1.63	.133	5	23	1.22	187	.20	2	2.31	.10	.34	1	4
STANDARD C	17	57	36	132	7.2	67	31	1051	4.02	37	19	6	36	48	17.3	15	18	57	.51	.095	37	56	.92	174	.07	34	1.91	.06	.14	11	-

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Tl %	B ppm	Al %	Na %	K %	W ppm	Au* ppb
101726	2	107	7	36	.2	9	11	244	3.21	15	5	ND	1	33	.2	3	2	73	1.58	.113	5	7	.60	37	.27	6	1.62	.04	.08	1	7
101727	1	146	9	59	.1	47	19	316	4.59	21	5	ND	2	41	.2	10	4	170	1.18	.245	8	64	.91	135	.33	2	1.71	.07	.74	1	28
101831	1	244	45	116	.1	14	23	520	5.26	23	6	ND	2	24	.5	7	2	87	2.94	.117	6	2	1.01	32	.14	13	2.84	.03	.07	1	6
101832	1	58	8	150	.1	13	13	864	5.18	15	5	ND	2	61	.4	4	2	152	.86	.123	7	2	1.98	118	.29	2	3.04	.18	1.69	1	3
101833	1	27	26	40	.1	18	7	557	2.14	19	5	ND	2	35	.2	2	2	67	3.18	.134	7	10	.44	19	.15	405	2.13	.03	.04	1	6

101833

GEOCHEMICAL ANALYSIS CERTIFICATE

litzi (JEW)

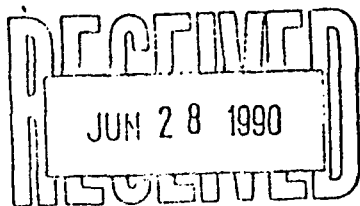
Noranda Exploration Co. Ltd. PROJECT ~~9006-035-285~~ File # 90-1942

P.O. Box 2380, 1050 Davie St., Vancouver BC V6B 3T5

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm
18626	1	234	11	369	.2	54	16	557	4.73	2	5	ND	1	48	1.6	2	2	83	4.82	.203	6	109	1.11	27	.20	18	2.61	.08	.17	1
18627	1	170	8	47	.2	26	20	321	5.13	15	5	ND	2	47	.2	2	2	70	2.95	.100	5	16	.85	61	.18	13	2.56	.08	.24	1
18628	1	248	15	56	.2	33	19	458	4.74	4	5	ND	1	44	.2	2	2	88	5.30	.155	7	59	1.02	24	.21	16	3.07	.06	.19	1
18629	1	154	8	63	.1	62	20	512	4.72	10	5	ND	1	53	.2	2	2	123	1.84	.136	6	138	1.72	253	.26	10	2.51	.08	.99	1
56726	1	4336	11	112	3.1	38	36	573	9.62	14	5	ND	2	17	2.0	2	2	113	2.28	.189	9	98	.55	9	.10	5	3.28	.05	.08	1
STANDARD C	18	61	38	132	7.3	72	31	1025	4.03	43	20	7	37	53	18.4	15	20	57	.51	.089	38	59	.93	181	.09	36	1.94	.06	.14	11

ICP - .500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER. THIS LEACH IS PARTIAL FOR MN FE SR CA P LA CR MG BA TI B W AND LIMITED FOR NA K AND AL. AU DETECTION LIMIT BY ICP IS 3 PPM. - SAMPLE TYPE: Rock Pulp

DATE RECEIVED: JUN 22 1990 DATE REPORT MAILED: *June 25/90* SIGNED BY: *[Signature]* D. TOYE, C. LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

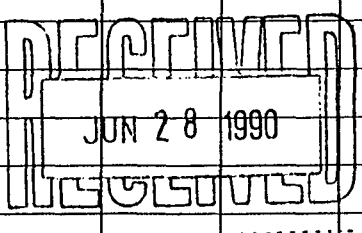


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NORANDA GEOCHEM LABORATORY

LOCATION Mitzi PROJECT 285 COLLECTOR DEW DATE RECEIVED June / 15 / 90 CODE 9006-035 SHEET 1 of 1
 MATERIAL Rock DATE ANALYSED Jun / 26 / 90 ANALYST DJ
 REMARKS 10g / Aqua Regia / MURK / AA

T.T. NO.	SAMPLE NO.	ppb Au																	
79F	18626	5																	
80	18627	5																	
1	18628	5																	
2	18629	5																	
83F	56726	300																	



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[Handwritten signature]

GEOCHEMICAL ANALYSIS CERTIFICATE

Noranda Exploration Co. Ltd. PROJECT 9006-048-285/ File # 90-2247 Page 1

P.O. Box 2380, 1050 Davie St., Vancouver BC V6B 3T5

Table with columns for SAMPLE#, Mo, Cu, Pb, Zn, Ag, Ni, Co, Mn, Fe, As, U, Au, Th, Sr, Cd, Sb, Bi, V, Ca, P, La, Cr, Mg, Ba, Ti, B, Al, Na, K, W. Rows include sample IDs like 79400E 78500N and STANDARD C.

ICP - .500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER. THIS LEACH IS PARTIAL FOR MN FE SR CA P LA CR MG BA TI B W AND LIMITED FOR NA K AND AL. AU DETECTION LIMIT BY ICP IS 3 PPM. - SAMPLE TYPE: Soil Pulp

DATE RECEIVED: JUL 4 1990 DATE REPORT MAILED: July 10/90 SIGNED BY: C. Leong, D. TOYE, C. LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Tl %	B ppm	Al %	Na %	K %	M ppm
80000E 79400N	1	107	6	74	.1	82	16	764	3.55	16	5	ND	1	123	.3	2	2	82	1.28	.074	11	127	1.42	132	.19	4	2.41	.03	.19	1
80000E 79450N	1	45	7	113	.1	36	13	355	4.11	10	5	ND	1	42	.2	2	2	98	.56	.244	6	54	.77	132	.15	5	2.54	.02	.06	1
80000E 79500N	1	32	6	74	.1	32	9	250	3.52	9	5	ND	1	29	.2	2	2	102	.41	.062	8	62	.65	105	.20	3	1.89	.02	.09	1
80000E 79550N	1	76	7	80	.1	51	17	612	3.94	9	5	ND	1	53	.3	3	2	92	.88	.055	8	64	.85	128	.15	10	2.40	.03	.05	1
80000E 79600N	1	113	3	58	.4	25	6	1819	1.16	2	5	ND	1	81	.7	2	2	29	2.36	.122	9	43	.38	92	.04	6	1.14	.02	.03	1
80200E 78500N	1	38	18	433	.5	25	14	623	5.02	70	5	ND	1	45	.8	2	2	99	.32	.204	4	28	.69	105	.11	3	2.15	.01	.05	1
80200E 78550N	1	112	10	169	.1	16	24	441	5.43	22	5	ND	1	48	.6	2	2	108	.51	.176	6	21	.46	96	.11	5	2.83	.02	.05	1
80200E 78600N	1	41	9	102	.1	14	7	206	3.44	5	5	ND	2	31	.2	2	2	80	.35	.113	6	30	.47	76	.15	6	2.33	.02	.05	1
80200E 78650N	1	36	17	114	.1	16	8	258	4.50	10	5	ND	2	40	.2	2	2	102	.33	.091	8	32	.53	69	.14	4	2.41	.01	.06	1
80200E 78700N	1	235	16	175	.2	25	19	764	6.58	14	5	ND	1	176	.3	2	2	120	.49	.147	7	24	.96	171	.09	17	3.35	.02	.06	1
80200E 78750N	1	116	14	238	.3	122	39	965	6.65	82	5	ND	1	80	1.3	5	2	168	1.12	.248	9	188	1.37	105	.13	46	3.39	.01	.09	1
80200E 78800N	1	70	6	44	.1	97	18	182	3.98	3	5	ND	2	70	.5	4	2	103	.95	.027	5	175	2.59	77	.36	6	3.02	.02	.19	2
80200E 78850N	1	145	11	276	.1	98	43	1608	5.46	2	5	ND	2	45	.6	2	2	91	.86	.259	6	139	2.79	121	.23	9	2.91	.02	.21	1
80200E 78900N	2	82	25	155	.1	24	16	525	6.24	43	5	ND	2	253	.4	2	2	105	.82	.097	7	43	.85	289	.05	3	3.37	.01	.16	1
80200E 78950N	2	68	49	288	.3	17	19	588	8.64	74	5	ND	1	232	1.0	6	2	142	.78	.129	5	28	.44	154	.12	4	2.92	.01	.11	1
80200E 79000N	1	154	16	200	.1	41	17	797	4.28	9	5	ND	2	101	.3	2	2	79	.95	.094	10	38	1.10	95	.16	7	3.03	.04	.11	1
80200E 79050N	1	223	19	122	.1	90	24	435	6.33	37	5	ND	1	310	.6	7	2	85	2.34	.084	7	68	.83	80	.10	10	4.99	.02	.08	2
80200E 79100N	1	73	42	321	.1	29	25	1307	5.39	7	5	ND	1	63	.8	2	2	101	.74	.112	5	47	.46	103	.18	5	2.16	.01	.10	1
80200E 79150N	1	69	8	91	.2	28	12	435	3.99	23	5	ND	1	68	.4	2	2	87	1.84	.091	13	48	.54	78	.11	5	3.25	.02	.06	1
80200E 79200N	1	36	10	130	.1	27	9	255	5.75	12	5	ND	1	53	.2	2	2	151	.65	.061	5	63	.55	79	.20	4	2.42	.02	.08	1
80200E 79250N	1	48	8	175	.1	31	21	1689	5.51	26	5	ND	1	59	.5	2	2	141	.66	.132	5	60	.88	145	.17	6	2.33	.02	.10	1
80200E 79300N	1	57	5	139	.1	27	19	1306	4.39	14	5	ND	1	41	.2	2	2	103	.57	.111	8	55	.67	120	.17	6	2.36	.02	.08	1
80200E 79350N	1	426	5	113	.4	50	11	909	2.31	27	5	ND	1	137	.4	2	2	59	3.44	.119	8	69	.81	78	.06	10	1.53	.03	.09	1
80200E 79400N	1	51	6	88	.3	39	12	295	4.10	17	5	ND	1	44	.2	2	2	93	.47	.099	8	65	.77	103	.18	5	3.03	.02	.06	1
80200E 79450N	1	43	2	50	.1	47	13	252	3.64	12	5	ND	1	65	.2	2	2	89	.68	.054	8	68	.87	103	.21	4	2.22	.02	.06	1
80200E 79500N	1	43	5	85	.1	28	15	413	5.07	3	5	ND	2	52	.2	2	2	115	.52	.273	8	55	.74	146	.16	7	3.13	.02	.07	1
80200E 79550N	1	23	3	58	.1	21	7	266	3.57	6	5	ND	1	32	.2	2	2	95	.39	.102	5	49	.47	79	.16	4	1.64	.02	.04	1
80200E 79600N	1	92	4	51	.1	37	9	399	2.91	8	5	ND	1	49	.2	2	2	73	.84	.061	11	56	.63	74	.13	6	1.90	.02	.05	1
80200E 79650N	1	23	5	52	.1	21	9	265	2.98	3	5	ND	1	35	.2	2	2	76	.41	.073	7	43	.48	108	.15	3	1.80	.02	.04	1
80200E 79700N	1	50	2	39	.1	33	9	236	2.35	3	5	ND	1	38	.2	2	2	60	.52	.066	9	46	.66	119	.16	6	1.86	.02	.04	2
80200E 79750N	1	75	6	57	.1	48	15	316	3.37	6	5	ND	2	29	.2	2	2	75	.40	.059	8	59	.73	105	.15	6	2.40	.02	.05	1
80200E 79800N	1	31	4	77	.1	36	11	318	3.55	5	5	ND	1	25	.2	2	2	75	.35	.114	8	50	.56	96	.13	4	2.05	.01	.06	1
80200E 79850N	1	68	4	52	.1	38	12	493	3.08	8	5	ND	2	49	.2	2	2	76	.73	.073	10	55	.77	113	.16	4	1.64	.03	.07	1
80200E 79900N	1	105	7	67	.1	43	16	758	3.56	4	5	ND	2	60	.2	2	2	84	.96	.081	11	58	.98	135	.17	6	1.69	.03	.07	1
80200E 79950N	1	55	3	51	.1	38	13	415	3.08	2	5	ND	1	43	.2	2	3	74	.68	.073	11	57	.76	95	.15	7	1.56	.03	.06	1
80200E 80000N	1	76	3	64	.1	40	13	654	3.24	4	5	ND	1	54	.2	2	2	77	.89	.085	11	56	.87	129	.15	5	1.61	.03	.09	1
STANDARD C	18	60	38	132	7.0	71	31	1059	3.98	38	17	7	38	52	18.4	16	19	58	.51	.094	38	59	.93	182	.09	35	1.95	.06	.14	11

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm
80400E 78500N	1	38	7	106	.1	33	14	325	3.88	11	5	ND	1	35	.2	2	2	87	.36	.117	6	47	.70	123	.13	3	3.14	.01	.05	2
80400E 78550N	1	38	16	115	.3	21	12	403	3.62	8	5	ND	1	36	.2	2	2	88	.51	.096	6	38	.68	85	.14	6	1.99	.02	.09	1
80400E 78600N	1	20	15	97	.1	10	6	283	2.89	6	5	ND	1	24	.6	2	3	75	.27	.128	7	26	.27	75	.13	4	1.30	.01	.05	1
80400E 78650N	1	27	13	143	.1	23	10	534	3.98	6	5	ND	1	38	.3	2	2	84	.47	.233	8	43	.59	111	.11	9	1.96	.02	.05	1
80400E 78700N	1	36	19	130	.1	23	15	473	4.13	12	5	ND	1	38	.3	2	2	77	.48	.421	7	39	.64	148	.09	7	2.37	.02	.06	1
80400E 78750N	2	467	11	235	.5	111	32	309	6.49	12	5	ND	1	56	.2	2	2	122	1.35	.071	10	115	1.14	74	.23	4	3.57	.02	.12	1
80400E 78800N	1	106	16	173	.1	37	12	813	3.15	18	5	ND	1	58	.3	2	2	71	.86	.060	10	51	.63	99	.10	4	1.91	.02	.06	1
80400E 78850N	1	50	18	96	.1	49	18	758	3.98	11	5	ND	1	36	.2	2	2	88	.69	.070	6	81	.87	84	.14	5	2.14	.02	.11	1
80400E 78900N	1	50	11	68	.1	55	12	259	3.28	14	5	ND	1	39	.2	2	2	79	.49	.052	6	44	.60	72	.13	9	2.00	.02	.05	1
80400E 78950N	1	81	15	311	.1	53	12	341	3.78	15	5	ND	1	60	.2	2	2	84	.52	.085	5	69	1.04	99	.13	7	2.23	.02	.11	1
80400E 79000N	1	46	15	85	.1	47	13	450	3.36	23	5	ND	1	62	.2	2	3	75	1.27	.058	6	78	.97	107	.11	5	2.25	.02	.09	2
80400E 79050N	1	260	7	165	.1	231	32	331	4.86	48	5	ND	1	76	.2	4	2	97	.93	.074	12	144	1.87	86	.21	3	3.39	.01	.23	1
80400E 79100N	4	63	48	282	.4	21	11	213	6.79	20	5	ND	1	83	1.1	2	2	75	.62	.068	6	19	.31	100	.12	3	2.58	.01	.07	1
80400E 79150N	1	262	5	51	.3	43	6	573	.90	10	5	ND	1	93	.5	2	2	18	4.22	.109	4	13	.15	36	.02	10	.51	.01	.03	1
80400E 79200N	1	291	6	81	.2	40	11	307	4.03	41	5	ND	1	65	.6	2	2	79	1.63	.058	11	55	.53	59	.10	5	2.88	.02	.08	1
80400E 79250N	3	128	7	124	.1	32	15	508	5.12	35	5	ND	1	59	.2	2	2	106	.59	.037	7	50	.63	83	.16	8	2.51	.02	.09	1
80400E 79300N	2	39	16	118	.1	19	10	334	4.22	18	5	ND	1	37	.3	2	2	95	.37	.057	5	43	.47	80	.12	6	2.00	.01	.08	1
80400E 79350N	1	129	11	101	.1	41	13	404	3.60	17	5	ND	1	66	.4	2	2	82	.99	.069	17	55	.67	102	.11	5	2.87	.02	.08	1
80400E 79400N	1	130	10	72	.1	59	17	379	3.45	39	5	ND	1	103	.2	2	2	73	1.08	.054	7	63	.83	101	.11	5	2.36	.02	.08	1
80400E 79450N	1	524	10	131	.4	95	15	742	3.70	41	5	ND	1	58	.9	2	2	73	1.69	.056	9	66	.55	73	.10	3	1.96	.02	.05	1
80400E 79500N	1	141	13	57	.1	86	12	331	4.13	74	5	ND	1	64	.2	2	2	90	1.25	.043	12	65	.65	72	.14	4	3.23	.02	.07	1
80400E 79550N	3	315	4	53	.2	32	9	726	1.67	46	5	ND	1	102	.5	2	2	38	3.33	.070	9	29	.18	59	.03	5	.93	.01	.03	1
80400E 79600N	1	140	6	69	.1	50	16	621	3.62	13	5	ND	2	67	.3	3	2	91	1.24	.131	10	68	1.01	102	.15	5	1.72	.03	.15	1
80400E 79650N	1	25	6	50	.1	22	7	196	3.11	9	5	ND	1	26	.2	2	2	86	.38	.091	6	48	.49	84	.12	3	1.58	.02	.04	1
80400E 79700N	1	54	6	45	.1	40	11	321	2.62	8	5	ND	1	39	.2	2	2	66	.52	.077	8	53	.79	94	.13	2	1.82	.02	.05	1
80400E 79750N	1	92	2	43	.1	34	8	288	2.39	4	5	ND	1	41	.2	2	3	57	.74	.082	13	53	.62	102	.09	5	1.43	.02	.03	2
80400E 79800N	1	41	14	46	.1	33	10	239	3.43	5	5	ND	1	30	.2	2	2	80	.38	.052	6	56	.55	97	.12	2	2.30	.01	.03	1
80400E 79850N	1	37	9	82	.1	29	12	578	2.83	8	5	ND	1	24	.2	2	2	65	.36	.138	6	46	.51	89	.09	3	1.86	.01	.06	1
80400E 79900N	1	48	10	145	.1	29	14	687	3.43	6	5	ND	1	31	.2	2	2	80	.47	.149	5	56	.74	117	.11	2	1.92	.01	.07	1
80400E 79950N	1	45	6	94	.1	35	14	621	3.43	13	5	ND	1	35	.2	2	2	82	.36	.176	5	49	.73	140	.08	6	2.13	.01	.05	1
80400E 80000N	1	37	7	72	.1	32	11	304	4.28	12	5	ND	1	24	.2	2	2	99	.31	.174	6	60	.62	79	.09	2	1.99	.01	.06	1
80600E 78500N	1	33	12	103	.1	22	10	343	3.82	15	5	ND	1	56	.4	2	2	102	1.10	.062	7	39	.51	75	.12	5	1.91	.02	.05	1
80600E 78550N	1	22	2	122	.1	20	11	337	2.82	9	5	ND	1	31	.2	2	2	71	.40	.097	6	38	.48	87	.14	4	1.90	.01	.04	1
80600E 78600N	1	52	13	75	.1	30	10	380	3.35	7	5	ND	1	52	.2	2	2	87	.54	.092	5	52	.77	161	.12	3	2.10	.02	.06	1
80600E 78650N	1	327	16	111	.3	59	13	766	3.19	26	5	ND	1	65	.4	3	2	77	.96	.088	15	62	.87	114	.10	2	2.26	.02	.07	1
80600E 78700N	2	28	21	115	.1	17	8	267	4.23	17	5	ND	1	68	.5	2	4	104	.30	.175	7	38	.42	118	.06	2	1.93	.01	.07	1
STANDARD C	18	59	39	134	7.2	69	31	1021	3.67	38	19	7	36	52	18.4	16	18	55	.49	.098	36	60	.87	179	.08	36	1.81	.06	.14	13

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Tl %	B ppm	Al %	Na %	K %	W ppm
80600E 78750N	3	148	6	133	.1	113	19	290	6.21	36	5	ND	1	479	.2	2	2	124	.71	.031	3	164	2.22	228	.26	4	3.28	.01	.13	1
80600E 78800N	4	232	10	110	.1	63	17	455	9.46	9	5	ND	2	23	.4	2	2	106	.43	.168	5	163	1.32	91	.30	2	3.63	.01	.13	1
80600E 78850N	1	632	10	84	.1	402	28	620	6.95	2	5	ND	4	24	.5	2	2	127	.62	.072	13	253	3.80	23	.37	2	5.81	.02	.22	1
80600E 78900N	1	27	13	84	.1	19	5	259	3.17	9	5	ND	1	49	.2	2	2	83	.40	.075	7	34	.38	73	.15	4	1.52	.01	.07	1
80600E 78950N	1	46	14	155	.1	61	17	395	5.51	56	5	ND	2	131	.2	2	2	135	.80	.126	5	137	1.78	146	.20	4	3.19	.01	.19	1
80600E 79000N	1	46	8	153	.1	67	14	514	6.43	168	5	ND	1	29	.4	2	2	150	.73	.149	9	129	.66	58	.26	3	1.73	.01	.09	1
80600E 79050N	1	282	4	89	.1	251	31	584	5.65	75	5	ND	1	49	.2	2	2	116	1.41	.037	6	146	2.86	37	.31	4	3.48	.02	.13	1
80600E 79100N	1	332	11	114	.2	83	14	976	3.50	16	5	ND	1	269	.4	2	2	81	1.33	.077	14	64	1.00	136	.16	10	2.73	.03	.11	1
80600E 79150N	1	725	8	121	.7	102	12	384	2.17	14	16	ND	1	86	.8	2	2	54	2.23	.142	17	46	.61	69	.07	8	1.87	.03	.06	1
80600E 79200N	1	116	10	104	.1	57	16	949	3.87	23	5	ND	1	111	.2	2	2	84	1.49	.061	7	55	.90	97	.49	6	2.29	.04	.11	1
80600E 79250N	1	45	17	141	.1	19	12	1153	5.09	95	5	ND	1	85	.3	2	2	89	.57	.204	5	34	.48	147	.12	5	2.08	.01	.15	1
80600E 79300N	1	50	11	121	.1	27	11	350	5.15	35	5	ND	1	83	.3	2	2	127	.58	.060	6	50	.82	128	.22	7	2.78	.02	.10	1
80600E 79350N	1	37	9	137	.1	28	11	361	3.98	11	5	ND	1	63	.2	2	2	78	.98	.070	9	49	.68	84	.14	5	2.79	.02	.07	1
80600E 79400N	1	59	7	151	.1	43	15	460	4.84	24	5	ND	1	65	.2	2	2	107	.61	.173	7	74	.82	106	.19	6	2.58	.02	.10	1
80600E 79450N	1	33	9	101	.1	31	9	368	3.78	7	5	ND	2	39	.3	2	2	96	.48	.118	8	68	.64	90	.19	4	1.84	.01	.09	1
80600E 79500N	1	30	7	76	.1	28	7	190	3.38	20	5	ND	2	56	.2	2	3	111	.73	.040	7	68	.55	78	.24	5	1.42	.02	.13	1
80600E 79550N	1	37	6	96	.1	35	11	396	4.17	9	5	ND	1	42	.2	2	2	100	.55	.241	8	67	.77	105	.16	6	2.06	.02	.07	1
80600E 79600N	1	215	7	80	.3	52	9	561	2.07	15	5	ND	1	124	.4	2	2	52	2.97	.108	10	53	.63	77	.08	17	1.59	.03	.06	1
80600E 79650N	1	42	9	96	.1	38	12	477	4.19	7	5	ND	1	37	.2	2	2	105	.56	.240	6	70	.81	110	.17	5	2.45	.02	.06	1
80600E 79700N	1	36	6	47	.1	26	8	255	2.22	2	5	ND	1	44	.2	2	2	65	.61	.035	9	46	.59	97	.17	4	1.84	.02	.04	1
80600E 79750N	1	44	5	53	.1	43	13	344	3.26	5	5	ND	2	49	.2	2	2	80	.66	.058	8	65	.80	103	.18	6	2.05	.02	.06	1
80600E 79800N	1	35	7	51	.1	27	10	354	3.34	4	5	ND	1	49	.2	2	2	89	.72	.050	7	52	.67	95	.17	5	1.68	.02	.04	1
80600E 79850N	1	26	8	132	.1	30	11	359	4.65	2	5	ND	3	29	.2	2	2	110	.37	.150	8	63	.69	95	.19	3	2.26	.01	.07	1
80600E 79900N	1	73	8	169	.1	45	18	615	3.97	29	5	ND	3	33	.2	2	2	92	.46	.135	9	65	.67	104	.15	8	2.21	.02	.08	1
80600E 79950N	1	24	8	89	.1	17	7	252	3.17	2	5	ND	1	27	.2	2	2	83	.37	.123	7	44	.41	64	.16	4	1.48	.01	.04	1
80600E 80000N	1	55	9	109	.1	34	12	329	5.76	16	5	ND	2	33	.2	2	2	137	.46	.304	6	65	.75	94	.15	4	2.92	.01	.08	1
80800E 78500N	1	87	15	163	.1	51	19	349	5.50	22	5	ND	2	76	.2	2	2	121	.45	.301	6	84	1.18	183	.14	7	3.83	.02	.10	1
80800E 78550N	1	38	15	105	.6	18	8	572	3.43	2	5	ND	1	44	.4	2	2	80	.33	.228	7	46	.41	139	.12	5	1.92	.01	.08	1
80800E 78600N	2	137	16	180	.1	79	27	524	7.45	13	5	ND	3	43	.3	6	2	106	.36	.312	7	108	.77	110	.20	7	2.84	.01	.07	1
80800E 78650N	2	494	17	183	.3	290	81	2276	7.55	103	5	ND	2	44	1.2	3	2	115	2.10	.088	10	114	2.01	91	.21	12	3.64	.01	.35	3
80800E 78700N	1	33	10	102	.1	33	12	279	4.11	8	5	ND	2	37	.2	2	2	96	.44	.182	9	53	.59	95	.16	4	2.30	.01	.06	1
80800E 78750N	1	43	10	76	.1	47	13	325	4.20	23	5	ND	2	41	.2	2	2	102	.43	.049	7	62	.87	95	.21	7	2.43	.02	.06	1
80800E 78800N	3	749	11	144	.4	299	22	1115	4.02	260	5	ND	2	62	.8	3	2	94	1.82	.095	16	99	.86	86	.11	8	2.68	.02	.08	1
80800E 78850N	1	35	13	74	.1	32	7	236	3.75	11	5	ND	2	27	.2	2	2	91	.45	.107	7	70	.78	68	.18	3	2.01	.01	.07	1
80800E 78900N	4	78	12	148	.1	105	19	420	6.38	177	5	ND	3	45	.2	2	2	113	.45	.162	10	105	1.06	66	.13	5	3.41	.01	.08	1
80800E 78950N	2	97	12	92	.1	111	15	771	6.03	432	5	ND	3	31	.3	14	2	73	.79	.049	12	74	.15	123	.01	9	1.35	.01	.19	1
STANDARD C	18	60	39	132	7.1	71	31	1048	3.92	36	19	7	39	52	18.4	15	17	58	.50	.095	39	58	.91	182	.09	36	1.91	.06	.13	11

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm
80800E 79000N	1	33	10	79	.1	26	11	348	4.17	16	5	ND	1	32	.7	2	2	111	.58	.087	7	58	.65	79	.15	5	2.38	.01	.08	1
80800E 79050N	1	34	10	127	.1	33	14	421	4.36	8	5	ND	1	41	.8	2	2	101	.66	.093	6	61	.73	83	.14	9	2.67	.01	.10	1
80800E 79100N	1	65	15	70	.2	43	14	423	4.05	17	6	ND	1	52	.6	3	2	89	.70	.135	7	54	.93	149	.12	9	2.62	.01	.09	2
80800E 79150N	1	73	8	64	.1	50	13	835	3.26	4	5	ND	1	49	1.0	2	2	77	.85	.062	7	48	.76	70	.12	6	1.79	.02	.05	1
80800E 79200N	1	39	10	80	.1	34	12	250	3.88	15	5	ND	1	40	.8	2	3	89	.44	.076	6	54	.69	83	.12	3	2.51	.01	.05	1
80800E 79250N	1	123	5	83	.1	102	20	382	4.50	22	5	ND	1	83	.7	2	2	89	1.15	.048	8	101	1.45	119	.18	5	2.84	.02	.11	1
80800E 79300N	2	215	12	79	.2	154	22	772	4.88	29	5	ND	1	125	1.0	2	2	98	1.26	.076	11	69	1.31	112	.15	7	3.36	.03	.12	1
80800E 79350N	2	124	13	188	.2	100	17	695	3.74	18	5	ND	1	49	.2	4	2	75	.77	.058	9	61	.87	79	.11	4	2.18	.01	.07	1
80800E 79400N	2	283	7	88	.1	121	17	796	3.64	16	5	ND	2	43	.3	2	2	67	.73	.061	11	55	.80	75	.11	5	1.96	.01	.05	1
80800E 79450N	1	196	13	147	.7	70	17	1759	3.85	13	5	ND	1	52	2.6	2	2	83	1.37	.083	11	71	.66	152	.12	11	1.79	.02	.09	1
80800E 79500N	1	25	7	54	.1	26	8	228	3.12	15	5	ND	1	43	1.0	2	2	100	.51	.048	6	62	.55	88	.19	3	1.38	.01	.09	1
80800E 79550N	3	447	6	74	.3	123	14	1858	3.02	26	5	ND	1	85	1.4	2	5	63	3.14	.123	13	54	.60	103	.05	9	1.95	.02	.07	1
80800E 79600N	1	37	5	48	.1	26	9	214	3.19	11	5	ND	1	32	.3	2	2	83	.45	.034	6	56	.58	83	.13	3	2.35	.01	.04	1
80800E 79650N	1	39	6	74	.1	33	12	260	3.50	9	5	ND	1	27	.2	2	2	84	.47	.084	6	62	.65	98	.13	6	2.47	.01	.04	1
80800E 79700N	1	44	5	62	.1	37	13	340	3.33	9	5	ND	1	35	.2	2	2	83	.69	.050	7	66	1.03	100	.13	8	2.23	.02	.06	2
80800E 79750N	2	252	9	69	.2	46	9	844	2.65	31	5	ND	1	110	.5	3	2	63	2.93	.114	9	52	.66	83	.05	7	1.65	.02	.06	2
80800E 79800N	2	254	3	47	.2	40	7	682	1.90	26	5	ND	1	113	1.2	2	2	48	3.90	.112	6	39	.48	84	.04	9	1.27	.02	.04	1
80800E 79850N	1	84	9	63	.1	50	14	609	3.50	15	5	ND	1	45	.8	2	2	78	1.07	.054	13	69	.91	114	.11	9	2.19	.02	.06	1
80800E 79900N	1	61	7	54	.1	36	12	496	3.31	8	5	ND	1	48	.3	2	2	72	1.13	.053	11	64	.82	105	.11	8	1.88	.02	.06	2
80800E 79950N	1	44	5	86	.1	29	11	236	4.15	10	5	ND	1	32	.2	2	2	112	.50	.043	7	58	.70	90	.11	5	2.69	.01	.05	1
80800E 80000N	1	34	10	106	.1	28	10	230	4.47	2	5	ND	1	27	.2	2	2	114	.46	.131	6	66	.61	102	.08	2	2.45	.01	.07	1
STANDARD C	19	58	39	133	7.1	69	31	1038	4.10	41	19	7	36	48	18.7	16	22	59	.53	.098	37	58	.95	173	.08	34	2.02	.06	.13	11

285
Results

NORANDA VANCOUVER LABORATORY

PROPERTY/LOCATION: MITZI

CODE : 9006-048

Project No. : 285
Material : 164 SOILS
Remarks :

Sheet: 1 of 4
Geol.: D.E.W.

Date rec'd: JUN 22
Date compl: JUL 6

Values in PPM, except where noted.

T.	SAMPLE No.	PPB Au
3A	79400E-78500N	5
16	78550	5
17	78600	5
18	78650	5
19	78700	5
20	78750	5
21	78800	5
22	78850	5
23	78900	5
24	78950	5
25	79000	5
26	79050	5
27	79100	5
28	79150	5
29	79200	5
30	79250	5
31	79400E-79300N	5
32	80000E-78500N	5
33	78550	5
34	78600	5
35	78650	5
36	78700	5
37	78750	5
38	78800	5
39	78850	5
40	78900	5
41	78950	5
42	79000 -35 MESH	5
43	79050	5
44	79100	5
45	79150	5
46	79200	5
47	79250	5
48	79300	5
49	79350	5
50A	79400	5
2D	79450	5
3	79500	5
4	79550	5
5	80000E-79600N	5
6	80200E-78500N	5
	78550	5
	78600	5
9	78650	5
10	78700	5
11	78750	5
12	78800	5
13	80200E-78850N	5

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T.	SAMPLE No.	PRR Au
4	80200E-78900N	5
5	78950	5
6	79000	5
7	79050	5
8	79100	5
9	79150	5
0	79200	5
1	79250	5
2	79300	5
3	79350	5
4	79400	5
5	79450	5
6	79500	5
7	79550	5
8	79600	200
9	79650	5
0	79700	5
1	79750	5
2	79800	5
3	79850	5
4	79900	5
5	79950	5
6	80200E-80000N	5
7	80400E-78500N	5
8	78550	5
9	78600	5
0	78650	5
1	78700	5
2	78750	5
3	78800	5
4	78850	5
5	78900	5
6	78950	5
7	79000	5
8	79050	5
9	79100	5
0	79150	5
1	79200	5
2	79250	5
3	79300	300
4	79350	5
5	79400	5
6	79450	5
7	79500	5
8	79550	5
9	79600	5
0	79650	5
1	79700	5
2	79750	5
3	79800	5
4	79850	5
5	79900	5
6	79950	5
7	80400E-80000N	5
8	80600E-78500N	5
9	78550	5
0	80600E-78600N	5

T.	SAMPLE No.	PPB Au
22	80600E-78650N	5
23	78700	5
24	78750	5
25	78800	5
26	78850	5
27	78900	5
28	78950	5
29	79000	240
30	79050	5
31	79100	5
32	79150	5
33	79200	5
34	79250	5
35	79300	20
36	79350	60
37	79400	5
38	79450	10
39	79500	5
40	79550	5
41	79600	5
42	79650	5
43	79700	5
44	79750	5
45	79800	5
46	79850	5
47	79900	5
48	79950	5
49	80600E-80000N	5
0N	80800E-78500N	5
2Y	78550	5
3	78600	5
4	78650	5
5	78700	5
6	78750	5
7	78800	5
8	78850	5
9	78900	5
10	78950	5
11	79000	5
12	79050	5
13	79100	50
14	79150	5
15	79200	5
16	79250	5
17	79300	5
18	79350	5
19	79400	5
20	79450	5
21	79500	5
22	79550	5
23	79600	5
24	79650	5
25	79700	5
26	79750	5
27	79800	5
28	79850	5
29	80800E-79900N	5

T.

SAMPLE
No.

PPB
Au

9006-048
Pg. 4 of 4

80800E-79950N
Y 80800E-80000N

5
5

GEOCHEMICAL ANALYSIS CERTIFICATE

Noranda Exploration Co. Ltd. PROJECT 9006 (01) 285 File # 90-1894 Page 1

P.O. Box 2380, 1050 Davie St., Vancouver BC V6B 3T5

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm
L79000E 79700N	1	106	4	63	.1	40	14	480	3.31	17	5	ND	1	29	.2	2	2	79	.52	.134	8	47	.69	71	.14	5	1.69	.02	.07	1
L79000E 79750N	1	182	3	106	.2	81	36	665	6.78	28	5	ND	1	18	.2	2	2	120	.64	.064	7	66	.62	68	.19	3	2.24	.01	.08	1
L79000E 79800N	1	750	6	131	.4	183	115	2545	10.09	31	5	ND	1	30	.6	7	2	85	1.37	.177	6	59	.37	67	.07	6	2.23	.01	.06	1
L79000E 79850N	1	112	4	70	.1	46	15	331	4.60	36	5	ND	1	31	.2	4	2	105	.41	.055	7	75	.86	90	.19	2	2.52	.02	.06	3
L79000E 79900N	1	108	2	61	.1	37	11	274	3.78	24	5	ND	1	44	.2	2	2	90	.37	.077	8	59	.78	88	.20	4	2.10	.02	.05	1
L79000E 79950N	1	65	2	85	.1	32	14	415	3.91	17	5	ND	1	32	.2	2	2	84	.33	.065	8	45	.72	80	.16	2	2.04	.01	.06	3
L79000E 80000N	1	224	8	563	.3	63	38	854	5.09	17	5	ND	1	31	.7	2	2	80	.65	.173	7	57	.92	95	.20	4	2.16	.01	.15	1
L79200E 78500N	1	146	16	411	.6	13	23	2462	4.40	16	5	ND	1	96	.5	2	2	63	.37	.322	7	11	.19	334	.01	2	5.35	.02	.10	1
L79200E 78550N	1	245	10	302	.4	19	10	302	2.27	44	5	ND	1	38	.3	2	2	52	.44	.037	10	19	.46	126	.03	2	2.45	.01	.05	3
L79200E 78600N	1	509	5	73	.4	28	9	298	3.13	92	5	ND	1	93	.2	3	2	61	1.12	.070	22	27	.47	142	.05	2	2.47	.02	.05	3
L79200E 78650N	1	63	4	59	.1	23	9	234	3.05	16	5	ND	1	28	.2	4	2	83	.30	.072	7	32	.52	85	.14	2	2.24	.01	.04	3
L79200E 78700N	1	50	114	891	.8	20	9	457	3.02	23	5	ND	1	38	2.3	3	2	68	.47	.076	10	30	.47	58	.12	8	1.50	.02	.04	1
L79200E 78750N	1	35	8	125	.1	19	8	261	3.91	14	5	ND	1	31	.3	2	2	102	.29	.081	7	36	.46	101	.15	3	1.89	.01	.04	3
L79200E 78800N	1	35	14	98	.2	12	6	367	3.27	12	5	ND	1	182	.2	2	2	101	.43	.078	6	25	.26	272	.11	2	2.14	.01	.05	3
L79200E 78850N	1	149	2	731	.3	24	7	265	2.80	39	5	ND	1	61	1.1	2	2	64	1.08	.046	9	35	.44	81	.10	2	1.71	.02	.03	1
L79200E 78900N	1	40	7	172	.4	32	13	516	4.74	32	5	ND	1	40	.2	5	2	132	.45	.057	7	48	.56	116	.12	2	2.28	.01	.09	6
L79200E 78950N	1	81	6	55	.2	52	14	292	3.48	10	5	ND	2	42	.2	3	2	86	.31	.084	8	68	1.17	109	.20	10	2.47	.02	.08	2
L79200E 79000N	1	42	2	90	.2	30	11	299	3.55	13	5	ND	1	23	.2	2	2	89	.24	.032	7	40	.65	76	.18	5	1.81	.01	.04	3
L79200E 79050N	1	55	5	57	.2	39	10	1176	2.74	9	5	ND	1	38	.2	2	2	69	.48	.055	10	54	.88	94	.17	12	1.87	.02	.08	2
L79200E 79100N	1	75	6	84	.2	68	17	290	4.04	12	5	ND	1	31	.2	4	2	92	.41	.095	6	82	1.64	97	.23	9	2.73	.02	.15	1
L79200E 79150N	1	31	2	80	.2	26	10	295	3.30	12	5	ND	1	25	.2	2	2	88	.30	.107	8	50	.52	64	.15	5	1.79	.01	.06	2
L79200E 79200N	1	17	5	50	.1	10	4	168	1.83	2	5	ND	2	21	.2	2	2	51	.21	.034	12	25	.25	72	.16	2	1.23	.01	.04	3
L79200E 79250N	1	63	2	67	.2	76	16	313	4.48	14	5	ND	1	40	.2	5	2	105	.66	.119	9	110	1.68	81	.26	14	2.14	.02	.25	2
L79200E 79300N	1	40	3	61	.2	28	10	276	3.98	14	5	ND	1	27	.3	2	2	93	.33	.126	8	56	.67	88	.15	6	1.97	.01	.07	2
L79200E 79700N	1	59	2	53	.1	40	14	373	3.60	18	5	ND	1	30	.2	2	2	90	.48	.088	7	58	.69	75	.20	8	1.93	.02	.15	3
L79200E 79750N	1	48	3	60	.1	42	14	299	3.98	18	5	ND	1	28	.2	2	2	95	.39	.150	8	57	.69	97	.16	6	2.02	.01	.09	4
L79200E 79800N	1	45	6	58	.1	38	15	419	3.88	23	5	ND	1	31	.2	2	2	99	.51	.173	9	57	.66	90	.16	9	1.96	.01	.06	3
L79200E 79850N	1	24	5	79	.2	24	9	311	3.47	11	5	ND	1	24	.2	2	2	89	.40	.143	9	44	.45	67	.16	6	1.55	.01	.05	3
L79200E 79900N	1	44	7	116	.3	35	17	457	4.22	18	5	ND	1	24	.2	2	2	100	.39	.144	8	56	.64	79	.15	4	2.07	.01	.07	1
L79200E 79950N	1	35	6	70	.1	34	13	871	3.06	22	5	ND	1	28	.2	2	2	81	.47	.164	7	48	.58	101	.14	9	1.72	.01	.05	2
L79200E 80000N	1	35	4	104	.1	35	13	392	3.81	20	5	ND	1	29	.2	2	2	89	.39	.094	9	50	.69	85	.15	7	2.13	.01	.07	2
L79600E 78500N	1	15	3	125	.2	19	8	266	3.45	14	5	ND	2	30	.2	2	2	89	.33	.179	9	37	.42	102	.12	2	1.75	.01	.04	1
L79600E 78550N	1	19	19	128	.3	15	6	280	3.51	17	5	ND	1	35	.5	2	2	97	.34	.081	9	30	.36	92	.10	2	1.73	.01	.07	3
L79600E 78600N	1	25	37	185	.4	17	8	301	3.63	22	5	ND	1	40	.2	2	2	102	.40	.136	6	32	.45	95	.11	6	1.73	.01	.06	2
L79600E 78650N	1	26	26	118	.3	33	10	318	3.90	14	5	ND	1	46	.2	2	2	103	.35	.100	7	63	.83	113	.16	4	2.05	.02	.09	2
L79600E 78700N	1	211	3	97	.3	135	24	441	5.97	11	5	ND	2	252	.2	5	2	148	.66	.179	8	225	2.38	166	.26	8	3.83	.01	.20	2
STANDARD C	17	57	37	136	7.3	67	30	1052	3.84	42	15	6	36	47	18.8	16	18	58	.48	.094	36	57	.86	172	.09	34	1.75	.06	.14	13

ICP - .500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.
 THIS LEACH IS PARTIAL FOR MN FE SR CA P LA CR MG BA TI B W AND LIMITED FOR NA K AND AL. AU DETECTION LIMIT BY ICP IS 3 PPM.
 - SAMPLE TYPE: Soil Pulp

DATE RECEIVED: JUN 20 1990 DATE REPORT MAILED: *June 25/90* SIGNED BY: *C. Long* .D.TOYE, C.LEONG, J.WANG; CERTIFIED B.C. ASSAYERS

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm
L79600E 78750N	1	115	14	133	.2	117	36	3765	5.58	4	5	ND	1	291	.8	5	3	146	1.47	.144	6	195	2.61	314	.24	5	3.98	.02	.35	2
L79600E 78800N	1	40	17	213	.4	64	20	885	4.43	4	5	ND	1	74	.2	3	4	133	1.44	.097	6	159	1.72	168	.28	3	2.41	.02	.30	1
L79600E 78850N	1	34	15	128	.2	25	12	577	4.32	12	5	ND	1	71	.4	2	3	123	.96	.158	5	42	.62	180	.17	6	2.70	.01	.10	1
L79600E 78900N	1	42	6	152	.2	24	12	424	4.57	13	5	ND	1	69	.6	2	4	119	.55	.149	5	41	.73	172	.16	2	2.97	.01	.07	1
L79600E 78950N	1	37	18	89	.1	29	13	484	4.08	17	5	ND	1	38	.6	2	2	105	.68	.171	6	42	.72	88	.14	5	2.33	.01	.04	1
L79600E 79000N	2	69	12	126	.2	29	13	918	3.02	12	5	ND	1	51	.6	2	4	74	1.65	.086	10	42	.61	103	.09	5	2.47	.01	.04	1
L79600E 79050N	1	30	12	104	.1	20	10	468	3.62	19	5	ND	1	41	.4	2	2	105	.48	.088	6	39	.52	130	.13	2	1.77	.01	.05	1
L79600E 79100N	1	59	13	110	.4	16	7	540	2.76	13	5	ND	1	48	.5	2	3	83	.57	.124	8	36	.37	153	.13	2	1.56	.01	.10	1
L79600E 79150N	2	332	14	99	1.7	42	15	1381	3.22	15	5	ND	1	68	1.0	2	2	87	1.65	.134	24	50	.77	96	.07	4	2.50	.01	.06	1
L79600E 79200N	2	70	10	92	.6	24	9	563	2.27	10	5	ND	1	54	.8	2	2	61	1.87	.078	7	30	.32	80	.06	2	1.06	.01	.04	1
L79600E 79250N	1	46	14	68	.1	42	16	963	3.50	7	5	ND	1	46	.2	2	2	102	.99	.079	5	72	.91	129	.18	7	1.72	.02	.12	1
L79600E 79300N	1	75	11	76	.3	31	16	666	4.58	10	5	ND	1	62	.8	2	2	123	1.32	.061	8	55	.49	95	.14	3	1.79	.01	.05	1
L79600E 79350N	1	121	7	46	.2	32	9	240	3.00	7	5	ND	1	50	.4	2	2	79	1.27	.045	9	48	.49	78	.12	2	1.93	.01	.04	1
L79600E 79400N	1	41	2	79	.1	37	13	569	3.55	7	5	ND	1	35	.5	2	2	87	.67	.221	6	59	.82	122	.12	4	1.92	.01	.07	1
L79600E 79450N	1	39	6	49	.1	26	7	194	2.72	6	5	ND	1	27	.2	2	2	83	.40	.035	7	53	.54	79	.15	10	1.73	.01	.04	1
L79600E 79500N	1	345	3	111	.6	31	5	194	1.04	2	5	ND	1	81	1.1	2	3	46	3.19	.102	11	45	.35	92	.06	6	1.25	.01	.03	1
L79600E 79550N	1	42	12	51	.1	32	12	296	2.78	11	5	ND	1	25	.2	2	3	80	.46	.047	10	49	.62	83	.16	5	2.13	.01	.03	1
L79600E 79600N	1	82	2	51	.1	31	11	518	2.61	6	5	ND	1	45	.2	2	2	66	.96	.097	12	49	.64	89	.12	3	1.34	.02	.04	1
L79800E 78600N	1	16	12	150	.3	9	5	432	2.65	4	5	ND	1	112	.2	2	3	62	.35	.109	9	19	.31	125	.08	2	2.11	.01	.04	1
L79800E 78650N	1	74	15	76	.2	30	15	417	3.37	13	5	ND	1	50	.5	2	2	94	.53	.071	7	36	.80	153	.19	6	3.20	.01	.05	1
L79800E 78700N	1	64	13	112	.9	11	7	552	3.56	8	5	ND	1	316	.4	2	2	94	.91	.152	8	22	.54	329	.15	2	2.75	.01	.12	1
L79800E 78750N	1	118	6	159	.6	11	16	1777	3.98	2	5	ND	1	657	.7	2	2	100	1.94	.117	5	20	.97	626	.12	2	3.83	.01	.45	1
L79800E 78800N	1	34	8	96	.1	4	3	335	.98	2	5	ND	1	415	.2	2	4	30	1.28	.048	6	9	.15	395	.07	2	1.59	.01	.11	2
L79800E 78850N	1	83	14	204	.4	18	18	717	5.46	10	5	ND	1	679	.6	3	2	144	1.43	.124	5	24	1.64	528	.10	2	5.46	.02	.24	1
L79800E 78900N	1	130	10	100	.1	59	23	439	6.41	10	5	ND	1	168	.2	2	3	146	1.08	.126	6	98	1.58	118	.29	4	4.15	.02	.23	1
L79800E 78950N	1	532	10	153	1.1	26	15	412	7.65	16	5	ND	1	193	.7	6	2	136	.87	.104	6	18	.88	172	.12	2	4.04	.01	.08	1
L79800E 79000N	1	120	11	300	.4	64	28	977	7.02	36	5	ND	1	380	.6	5	2	166	1.33	.121	5	106	1.68	190	.21	2	5.10	.01	.33	1
L79800E 79050N	1	154	2	158	.2	66	19	892	7.48	27	5	ND	1	155	.3	5	4	155	1.71	.168	5	125	3.10	126	.25	6	5.52	.01	.73	1
L79800E 79100N	1	35	5	105	.2	24	14	534	4.64	21	5	ND	1	34	.6	2	2	124	.60	.211	6	50	.76	87	.16	4	2.47	.01	.07	1
L79800E 79150N	1	55	31	96	.2	18	14	2229	8.72	5923	16	ND	1	57	.4	10	3	119	1.26	.124	13	41	1.20	151	.05	6	2.46	.01	.05	1
L79800E 79200N	1	62	9	99	.3	30	12	539	3.84	26	5	ND	1	54	.9	2	2	102	1.34	.095	9	50	.65	115	.11	2	2.27	.01	.06	1
L79800E 79250N	5	305	9	85	1.6	28	14	3846	2.07	30	6	ND	1	94	1.4	2	2	63	3.73	.414	38	62	.30	136	.02	6	2.69	.01	.03	1
L79800E 79300N	1	191	4	63	.9	32	11	917	2.55	16	5	ND	1	72	1.8	2	2	64	2.17	.110	11	39	.37	103	.05	2	1.41	.01	.05	1
L79800E 79350N	1	314	3	79	.5	47	18	684	3.19	21	5	ND	1	55	.3	2	2	91	1.09	.068	20	72	.76	80	.15	6	1.87	.01	.08	1
L79800E 79400N	1	63	10	55	.1	39	12	587	2.82	17	5	ND	1	37	.2	2	2	79	.83	.040	8	50	.75	85	.13	3	1.64	.01	.06	1
L79800E 79450N	1	44	7	72	.3	35	11	335	3.90	11	5	ND	1	22	.8	2	2	92	.36	.078	6	54	.72	85	.16	5	2.41	.01	.05	1
STANDARD C	18	55	39	129	7.3	67	28	1019	3.79	42	18	6	36	48	17.2	16	20	55	.47	.087	37	59	.82	171	.08	32	1.72	.06	.14	11

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm
L79800E 79500N	1	271	5	68	.7	53	16	1170	3.29	14	5	ND	1	57	.7	2	2	74	1.45	.141	23	71	.83	109	.05	2	2.12	.01	.08	1
L79800E 79550N	1	101	5	68	.3	37	17	1188	3.39	14	5	ND	1	44	.4	2	2	77	1.07	.102	10	63	.82	94	.08	2	1.58	.01	.05	2
L79800E 79600N	1	27	4	39	.3	21	6	167	2.19	11	5	ND	1	23	.2	2	2	66	.35	.029	5	36	.43	75	.11	2	1.40	.01	.02	2
STANDARD C	18	57	43	135	7.1	67	31	1058	3.69	43	18	7	36	47	18.3	20	19	57	.51	.096	37	55	.88	175	.09	32	1.85	.06	.14	12

MITZI 285
Assay Results 19.

NORANDA VANCOUVER LABORATORY

PROPERTY/LOCATION: MITZI

CODE : 9006-031

Project No. : 285
Material : 75 SOILS
Remarks :

Sheet: 1 of 2
Geol.: T.C.

Date rec'd: JUN 15
Date compl: JUN 25

Values in PPM, except where noted.

T. T. No.	SAMPLE No.	PPB Au
35P	79000E-79700N	5
36	79750	5
37	79800	5
38	79850	5
39	79900	5
40	79950	5
41	79000E-80000N	5
42	79200E-78500N	5
43	78550	5
44	78600	5
45	78650	5
46	78700	5
47	78750	350
48	78800	5
49	78850	5
50P	78900	5
1	78950	5
2	79000	5
3	79050	5
4	79100	5
5	79150	5
6	79200	5
7	79250	5
8	79300	5
9	79700	5
10	79750	60
11	79800	5
12	79850	5
13	79900	5
14	79950	5
15	79000E-80000N	5
16	79600E-78500N	5
17	78550	5
18	78600	5
19	78650	5
20	78700	5
21	78750	5
22	78800	5
23	78850	5
24	78900	40
25	78950	5
26	79000	5
27	79050	5
28	79100	5
29	79150	5
30	79200	5
31	79250	5
32	79600E-79300N	5
33		5

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Copy to Terry W

T. T.
No.

SAMPLE
No.

PPB
Au

9006-031
Pg. 2 of 2

1	79600E-79350N	5
35	79400	5
36	79450	5
37	79500	5
38	79550	5
39	79600E-79600N	5
40	78800E-78600N	5
41	78650	5
42	78700	5
43	78750	5
44	78800	5
45	78850	5
46	78900	5
47	78950	5
48	79000	5
49	79050	5
50A	79100	5
2N	79150	5
3	79200	5
4	79250 -35 MESH	5
5	79300	5
6	79350	5
7	79400	5
8	79450	5
9	79500	5
10	79550	5
11	79800E-79600N	5

APPENDIX V

GEOPHYSICS INSTRUMENTATION
AND IP PSEUDO-SECTIONS

IP 6

DESCRIPTION

IP 6 is a six channel multiwindow Time Domain Induced Polarization receiver.

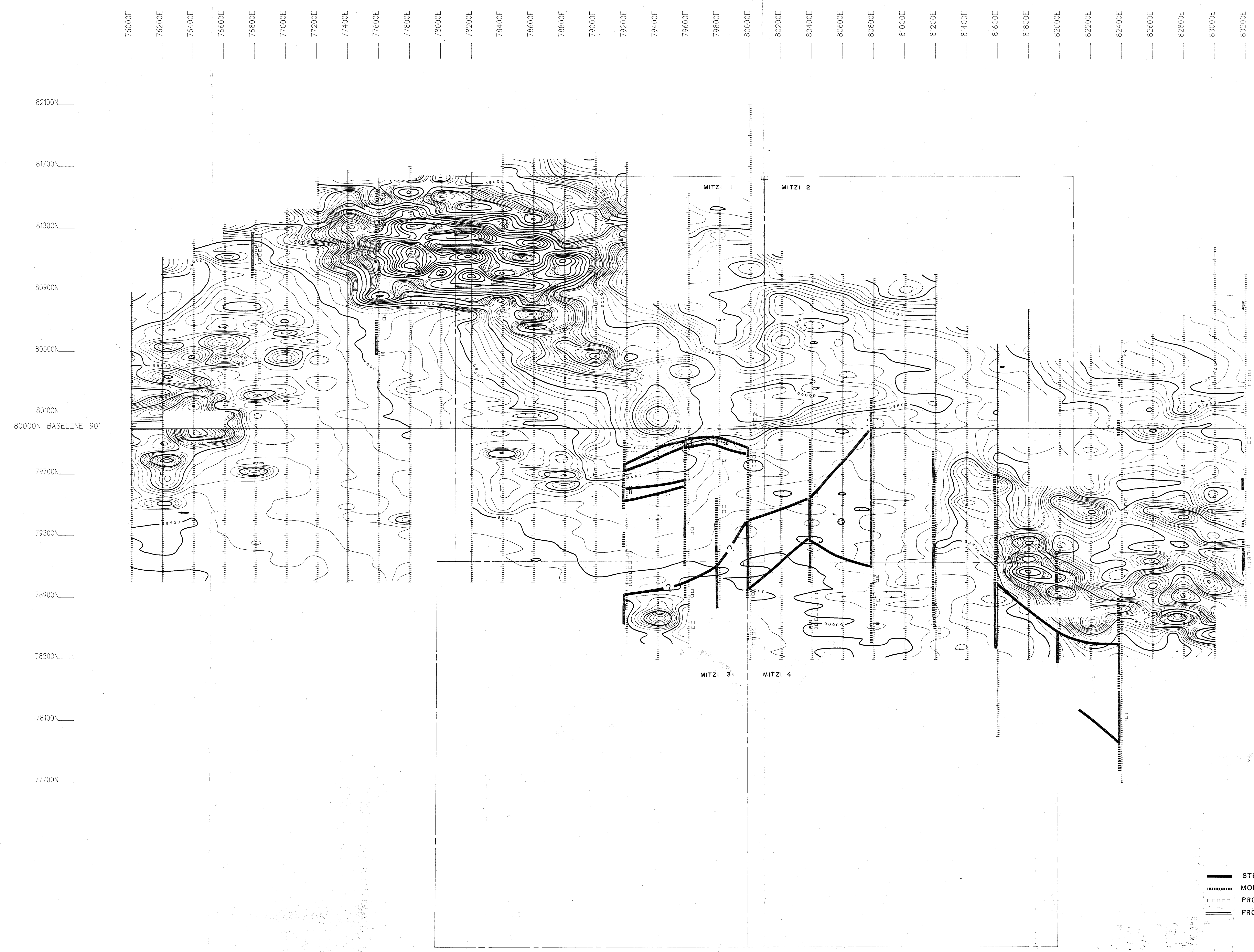
The six channels permit to measure six receiver dipoles, which provides a high efficiency in the field.

IP decay curves may be analysed by various types of sampling : up to 10 windows are available, with arithmetic or logarithmic widths. This multiwindow analysis provides a high accuracy in the definition of the decay curve.

Measurements are made very easy through a fully automatic measuring process : self test and calibration, autosynchronization and re-synchronization at each cycle, SP buck out including linear drift correction, automatic gain selection, digital stacking for noise reduction, and fully documented displays are controlled by the microprocessor to ensure the highest accuracy and reliability of the results.

The internal memory can store up to eighteen hundreds measurements ; a serial link permits to transfer the data to a printer for listing the results or to a microcomputer for storing, plotting and interpreting the data.

Efficiency, accuracy, ease to use make IP 6 a high technology key tool for Induced Polarization Prospecting.



- IP ANOMALIES
- STRONG INCREASE IN POLARIZATION
 - MODERATE INCREASE IN POLARIZATION
 - PRONOUNCED RESISTIVITY INCREASE
 - PRONOUNCED RESISTIVITY DECREASE

**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

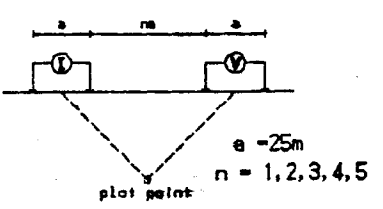
20,383

Instrument : SMC4
 Field : 1274
 Datum : 00 nT
 Contour Interval : 100 nT
 Conductor Axis :
 20m 10m 5m 20m 40m

MITZI	
MAGNETOMETER SURVEY and IP ANOMALY MAP	
PROJECT: MITZI PROJECT #: 285 BASELINE AZIMUTH: 90 Deg.	
SCALE = 1:10000	DATE: 6/ 8/90
SURVEY BY:	NTS: 93N/1
FILE: MMITZI NORANDA EXPLORATION	
Fig. 8	

Line 79800 E

Dipole-Dipole Array



Logarithmic Contours 1, 1.5, 2, 3, 5, 7.5, 10, ...

Instrument : EDA IP 6
Frequency : 2s ON / 2s OFF
Operators : BC

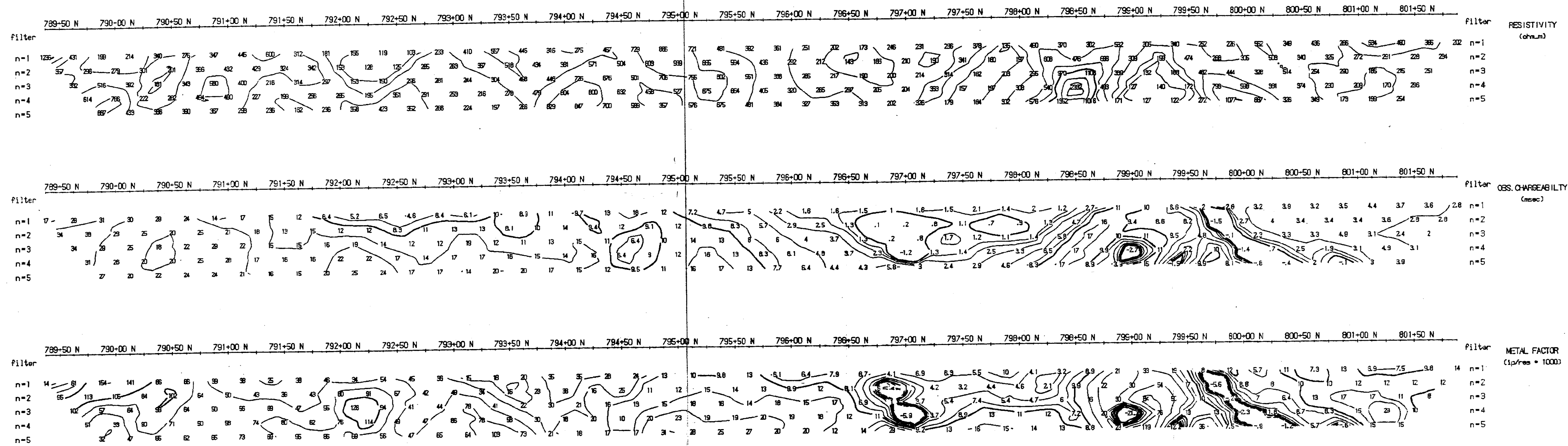
INTERPRETATION
 ■■■■■ Strong increase in polarization
 ■■■■■ Moderate increase in polarization
 ~~~~~ Weak increase in polarization

**NORANDA EXPLORATION**

**INDUCED POLARIZATION SURVEY**  
 Line 79800 E  
 Mitzi Opiton, Omineca M.D., B.C.

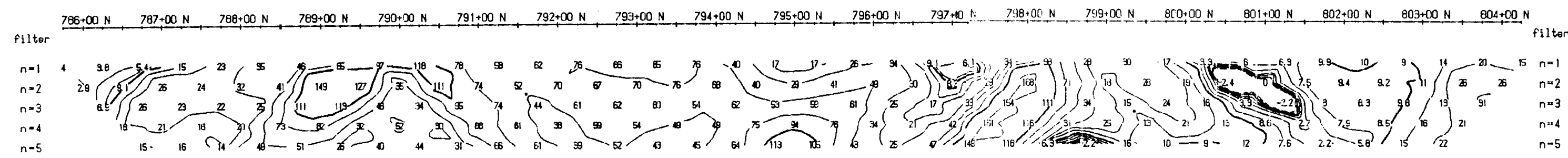
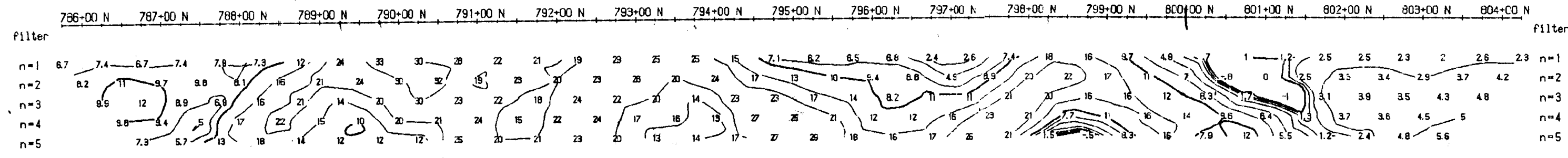
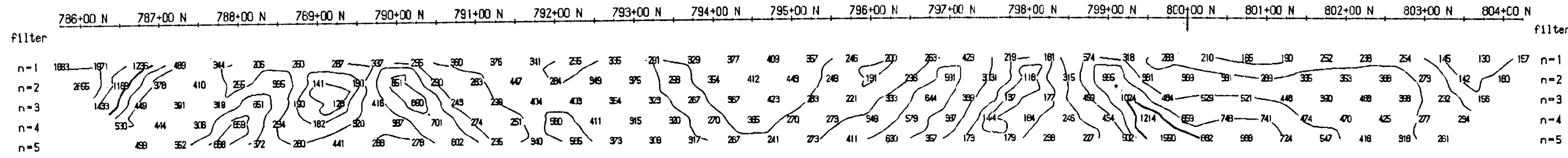
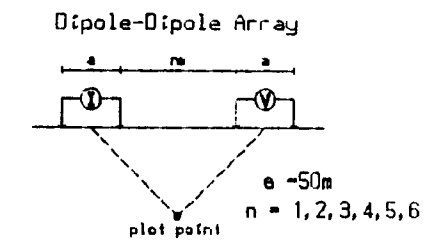
Date: June 1990  
 Interpretation by: L. Bradish  
 Scale 1:2,500

Pacific Geophysical



**20383**

# Line 8000 E



Logarithmic Contours 1, 1.5, 2, 3, 5, 7.5, 10, ...

Instrument : EJA IP 6  
Frequency : 2s ON / 2s OFF  
Operator : BC

### INTERPRETATION

- ▬ Strong increase in polarization
- ▬ Moderate increase in polarization
- ▬ Weak increase in polarization

## NORANDA EXPLORATION

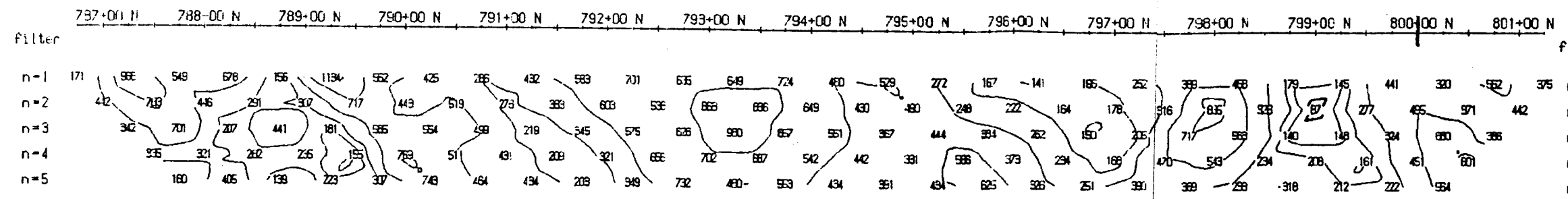
### INDUCED POLARIZATION SURVEY

Line 8000 E  
Mitzi Opiton, Omineca M.D., B.C.

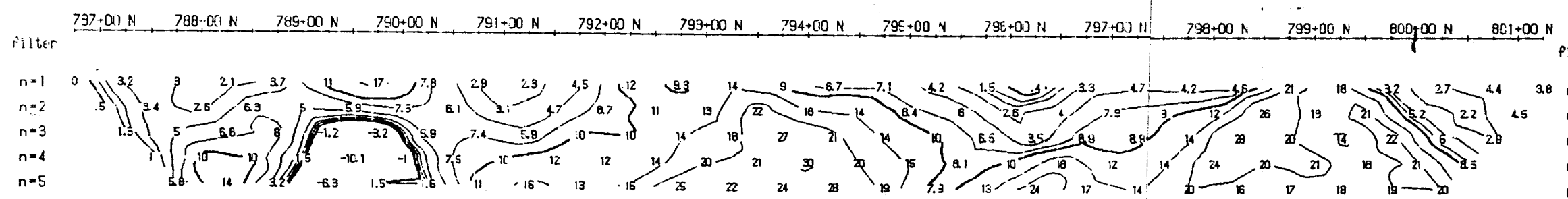
Date: June 1990  
Interpretation by: L. Bradish  
Scale 1:5000

Pacific Geophysical

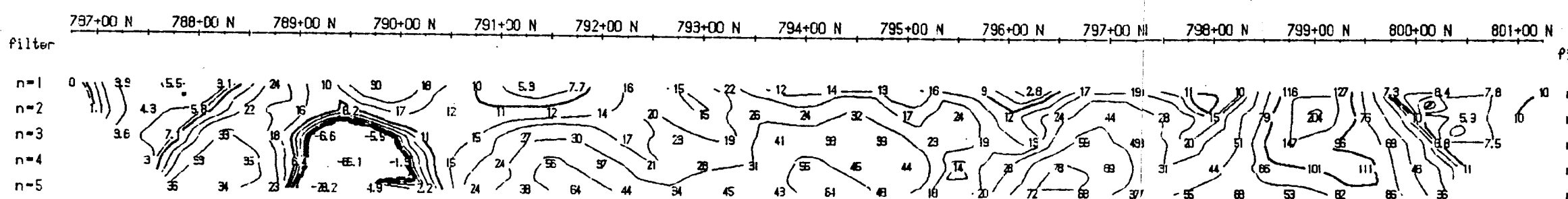
# 20383



RESISTIVITY  
(ohm.m)

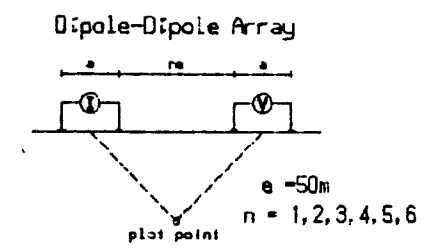


CROSS-CHARGEABILITY  
(msec)



METAL FACTOR  
(ip/res \* 1000)

Line 79600 E



Logarithmic Contours 1, 1.5, 2, 3, 5, 7.5, 10, ...

Instrument : EDA IP 6  
Frequency : 2s ON / 2s OFF  
Operator : BC

- INTERPRETATION
- ▬ Strong increase in polarization
  - ▬▬▬ Moderate increase in polarization
  - ▬▬▬ Weak increase in polarization

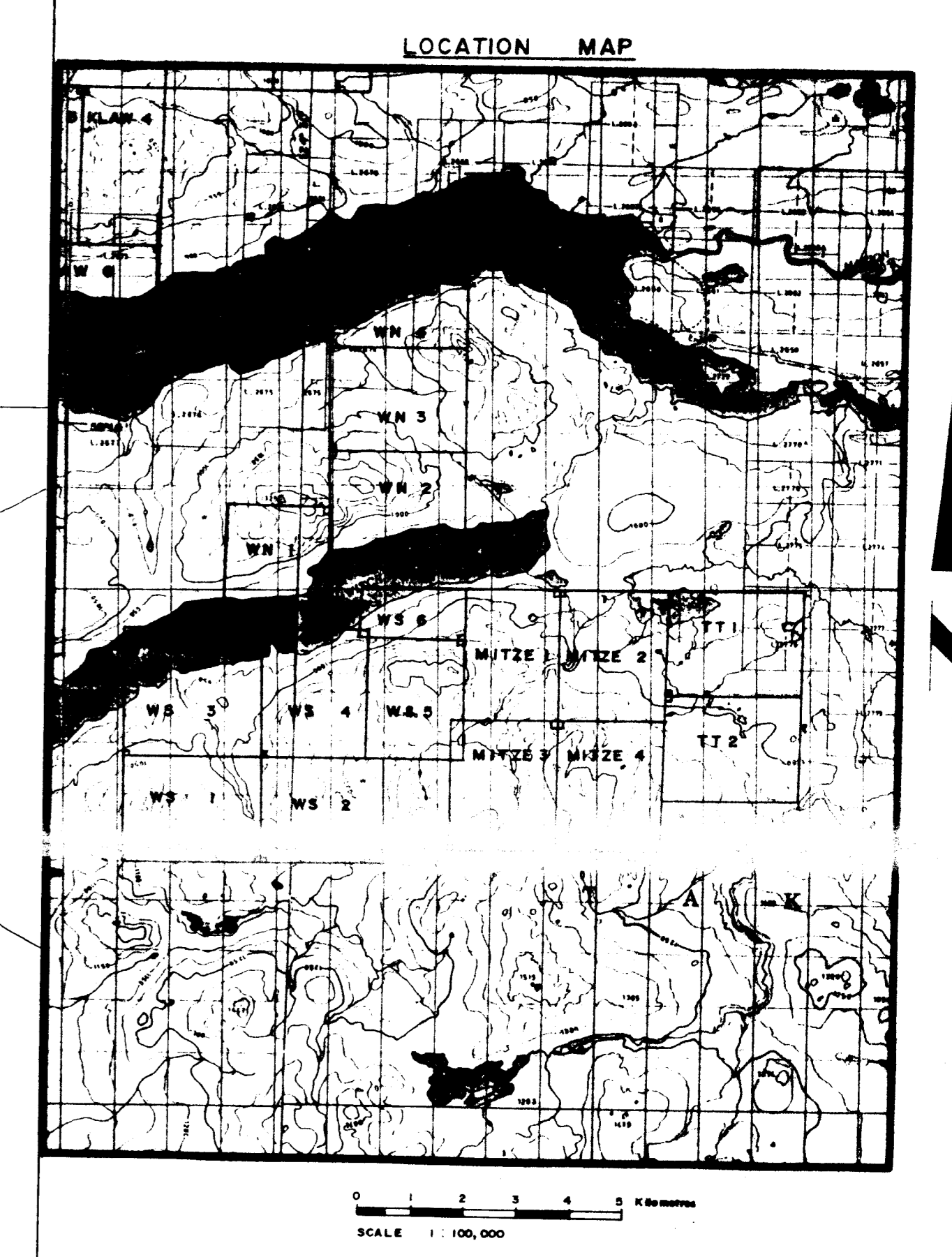
NORANDA EXPLORATION  
INDUCED POLARIZATION SURVEY  
Line 79600 E  
Mitzi Opiton, Omineca M.D., B.C.

Date: June 1990  
Interpretation by: L. Bradish  
Scale 1:5000

Pacific Geophysical

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WITCH LAKE

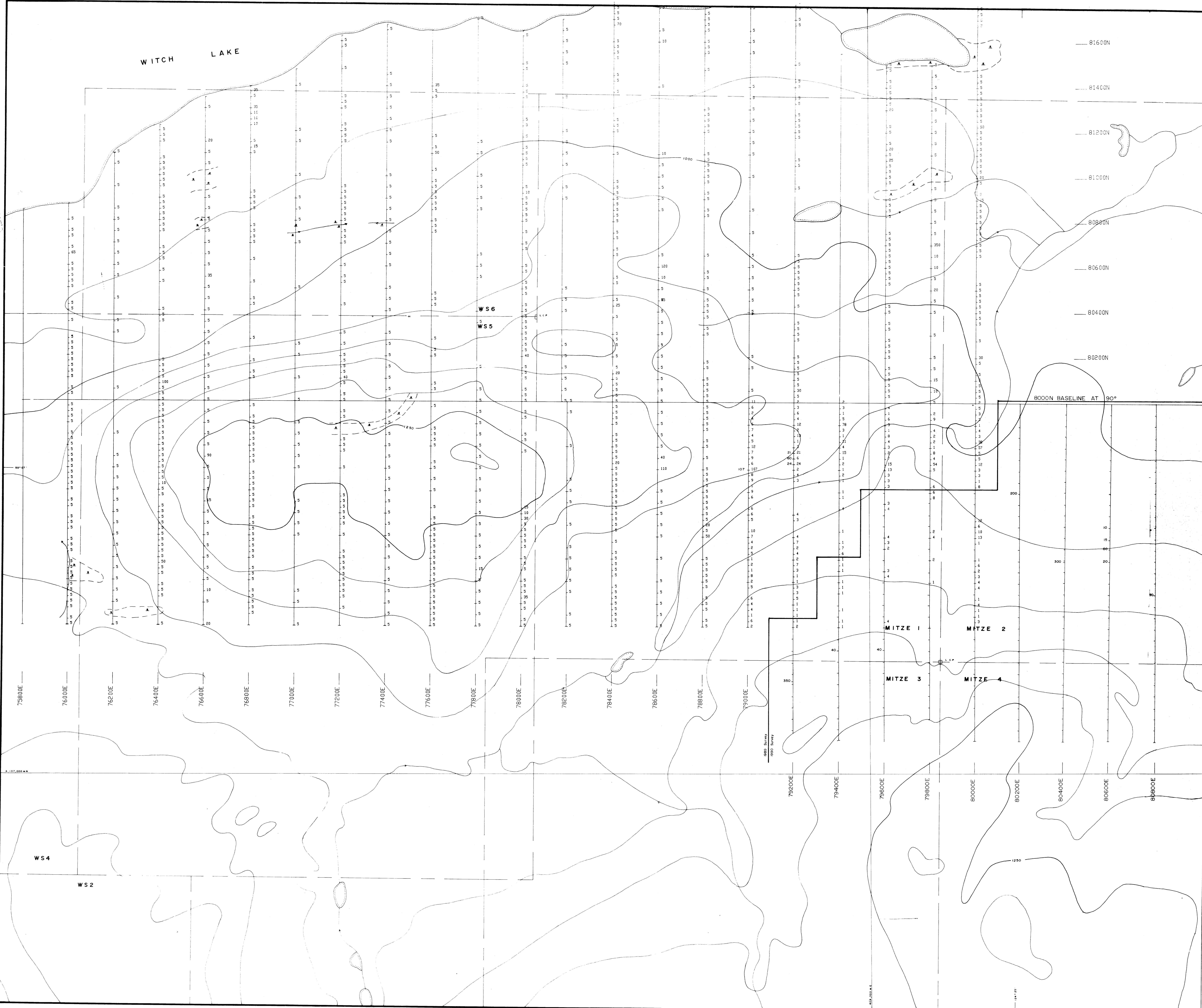


LEGEND

- 30 Soil Geochem Survey Au(ppb) (1999)
- 20 Soil Geochem Survey Au(ppb) (1990)
- (Values less than 10 ppb not plotted)

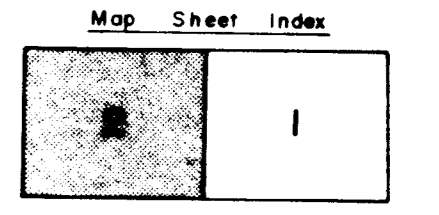
79800N  
79600N  
79400N  
79200N  
79000N

8000N BASELINE AT 90°



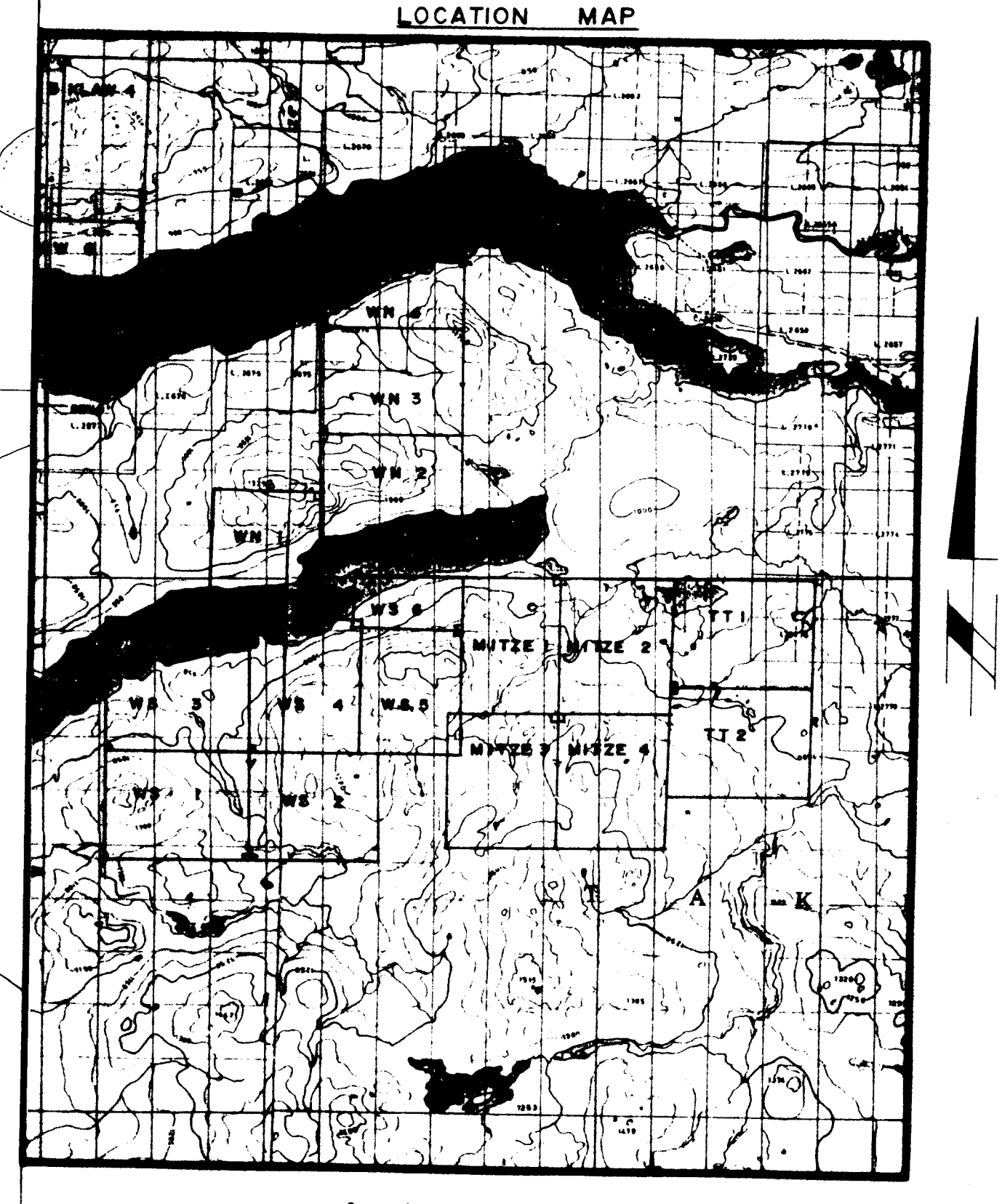
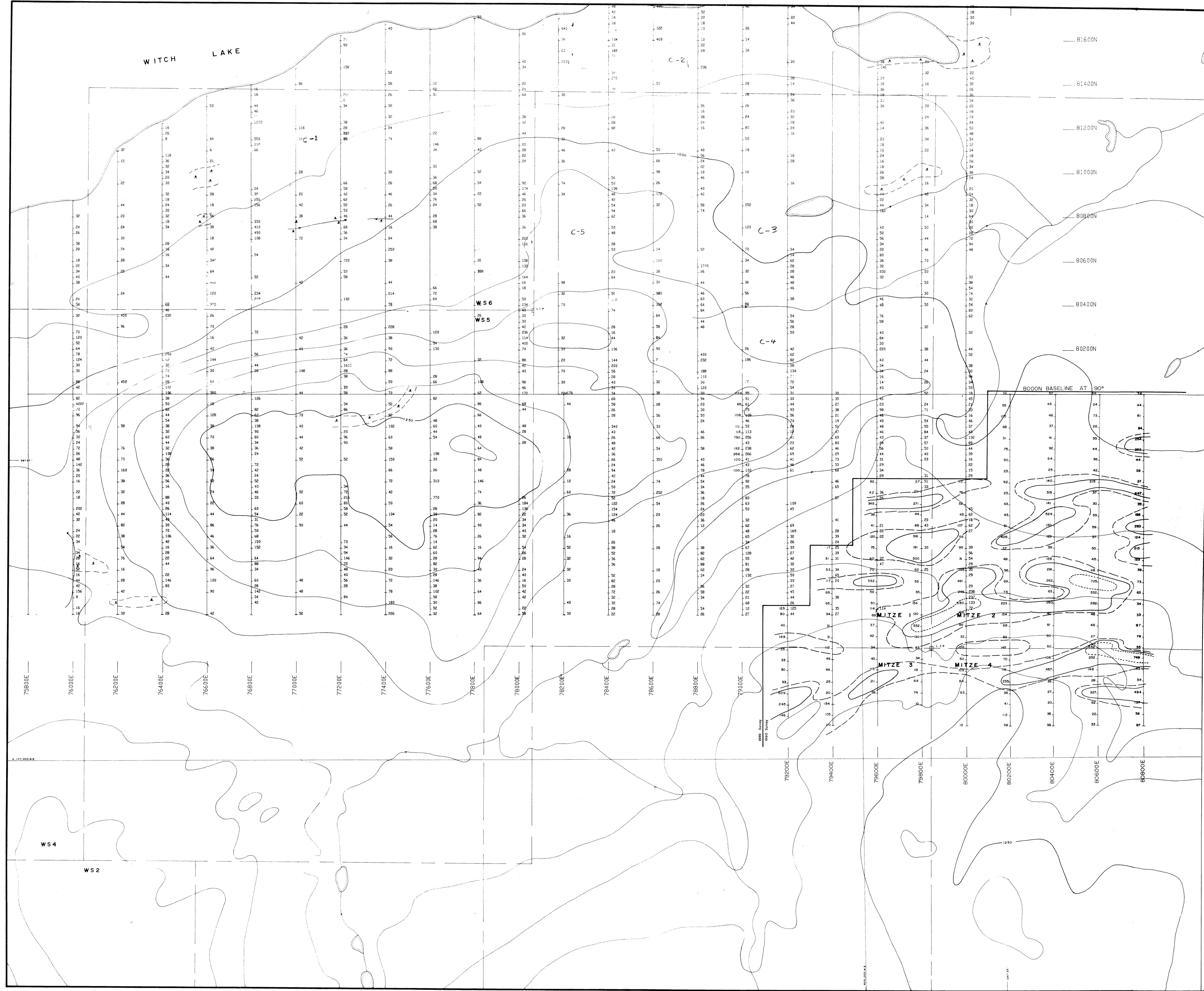
GEOLOGICAL BRANCH ASSESSMENT REPORT

20,383



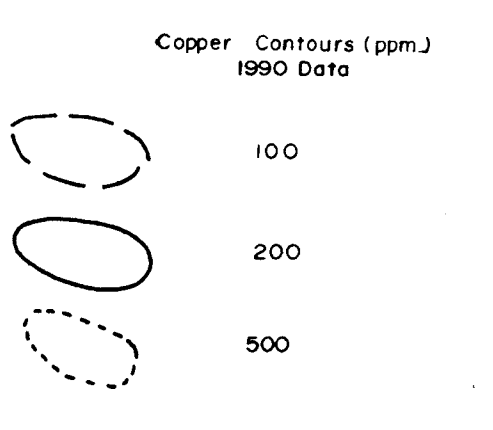
0 100 200 300 400 500 m  
SCALE 1:5,000

|               |                            |                |
|---------------|----------------------------|----------------|
| REVISED       | MITZE OPTION               |                |
| 01/99         | SOIL GEOCHEM SURVEY        |                |
|               | Au(ppb)                    |                |
| PROJ. No. 285 | SURVEY BY: B.C. I.C.       | DATE:          |
| NTS. 93 N/1   | DRAWN BY: S.F.R.           | SCALE: 1:5,000 |
| DWG. No.      | NORANDA EXPLORATION        |                |
| Fig. 6        | OFFICE PRINCE GEORGE, B.C. |                |



**LEGEND**

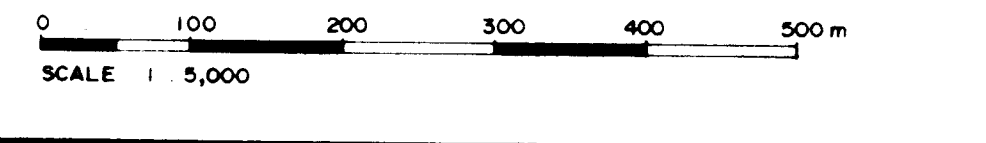
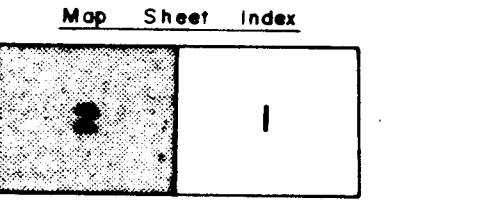
- Soil Geochem Survey Cu(ppm) (1989)
- Soil Geochem Survey Cu(ppm) (1990)



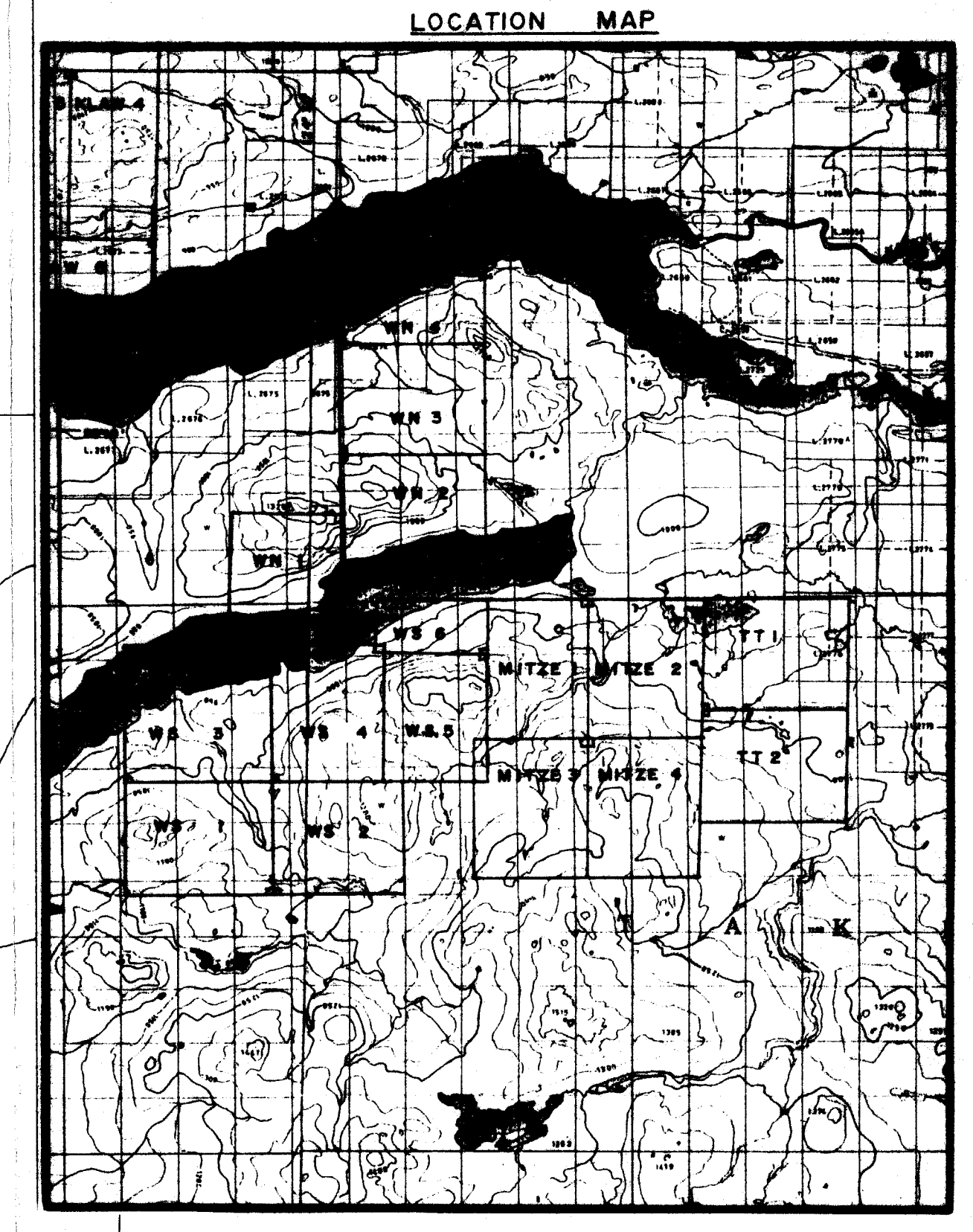
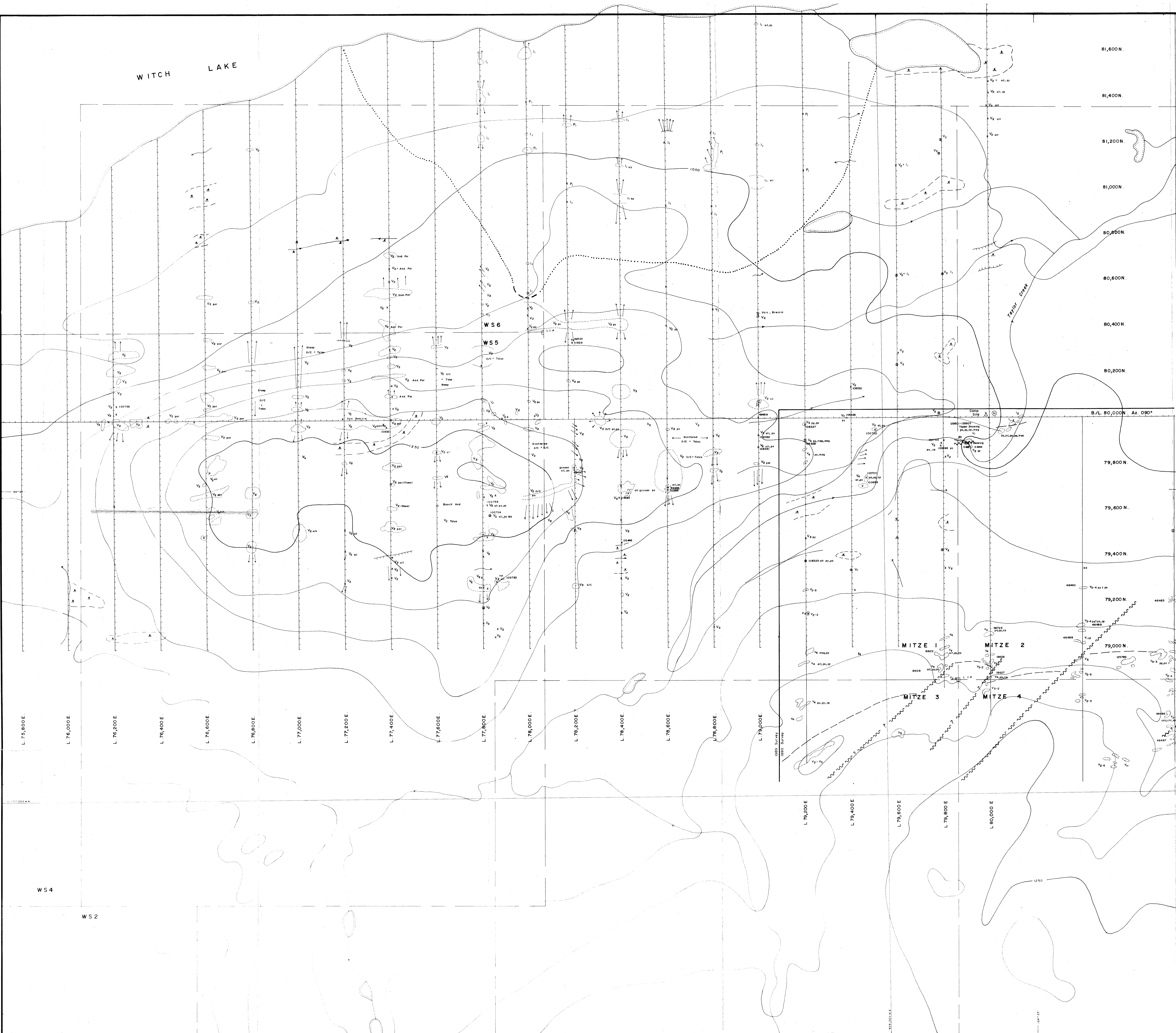
79800N  
79600N  
79400N  
79200N  
79000N

**GEOLOGICAL BRANCH  
ASSESSMENT REPORT**

**20,383**



|                       |                                    |
|-----------------------|------------------------------------|
| REVISED<br>OCT / 1990 | <b>MITZE OPTION</b>                |
|                       | <b>SOIL GEOCHEM SURVEY</b>         |
|                       | Cu (ppm)                           |
| PROJ. No. 285         | SURVEY BY: S.C. & R.C. DATE: _____ |
| NTS. 93.3%            | DRAWN BY: S.K.B. SCALE: 1:5,000    |
| DWG. No.              | <b>NORANDA EXPLORATION</b>         |
| Fig 5                 | OFFICE: PRINCE GEORGE, B.C.        |



SCALE 1:100,000

**LEGEND**

- ROCK TYPES**
- P GABBRO
  - D DIORITE / SYENODIORITE
  - V1 ANDESITE (V - tuffaceous)
  - V2 FELDSPAR / AUGITE (PORPHYRITIC ANDESITE)
  - V3 TRACHYTE FLOWS (V - porphyritic)
  - V4 TRACHYTE FLOWS (V - porphyritic)
- SYMBOLS**
- ep epidote
  - py pyrite
  - cp chalcopyrite
  - mal malachite
  - po pyroxenite
  - all alteration
  - por porphyritic
  - mag magnetite
  - chl chlorite
  - obl obsidian
  - sub-sub-outcrop
  - sk skarn
  - hf hornfels
  - alt alteration
  - mag magnetite
  - obl obsidian
  - chl chlorite
  - pot potassium

- SYMBOLS**
- Clearcut
  - Road
  - Stream
  - Ocean
  - Talus
  - Outcrop large, small
  - Flint sample
  - Joints
  - Geological contact (definite, inferred, assumed)
  - Strike and dip of bedding
  - Rock sample site
  - Helipad
  - Assumed Fault

**GEOLOGICAL BRANCH ASSESSMENT REPORT**

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|                 |   |
|-----------------|---|
| Map Sheet Index |   |
| 2               | 1 |

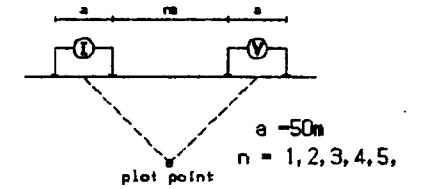
SCALE 1:5,000

|                       |                             |                |
|-----------------------|-----------------------------|----------------|
| REVISED<br>OCT / 1990 | <b>MITZE OPTION</b>         |                |
|                       | <b>GEOLOGY MAP</b>          |                |
| PROJ. No.             | SURVEY BY: T.W.             | DATE:          |
| N.T.S. 9.2 N/C        | DRAWN BY: S.K.B.            | SCALE: 1:5,000 |
| DWG. No.              | <b>NORANDA EXPLORATION</b>  |                |
| Fig. 4                | OFFICE: PRINCE GEORGE, B.C. |                |



# Line 82000 E

Dipole-Dipole Array



Logarithmic Contours 1, 1.5, 2, 3, 5, 7.5, 10, ...

Instrument : EDA IP 6  
 Frequency : 2s ON / 2s OFF  
 Operator : BC

### INTERPRETATION

- Strong increase in polarization
- Moderate increase in polarization
- Weak increase in polarization

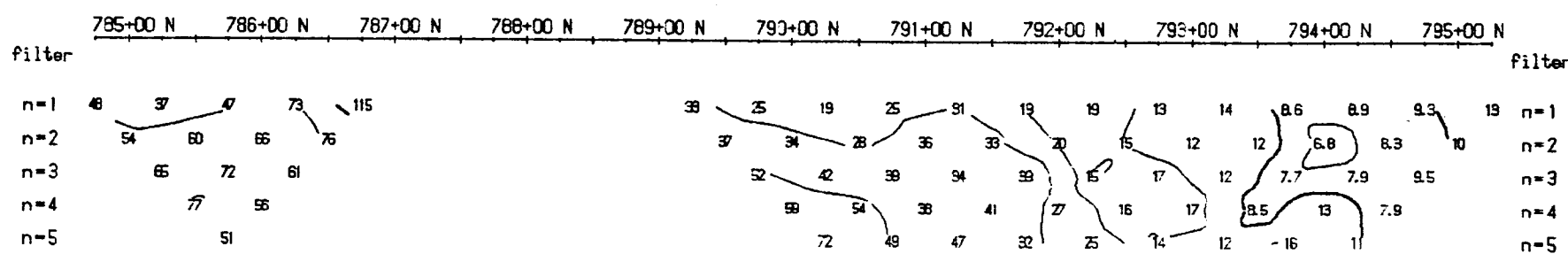
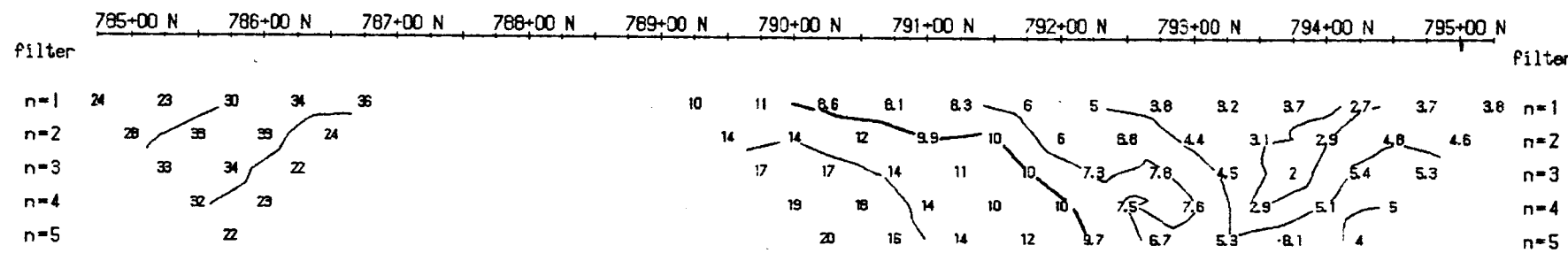
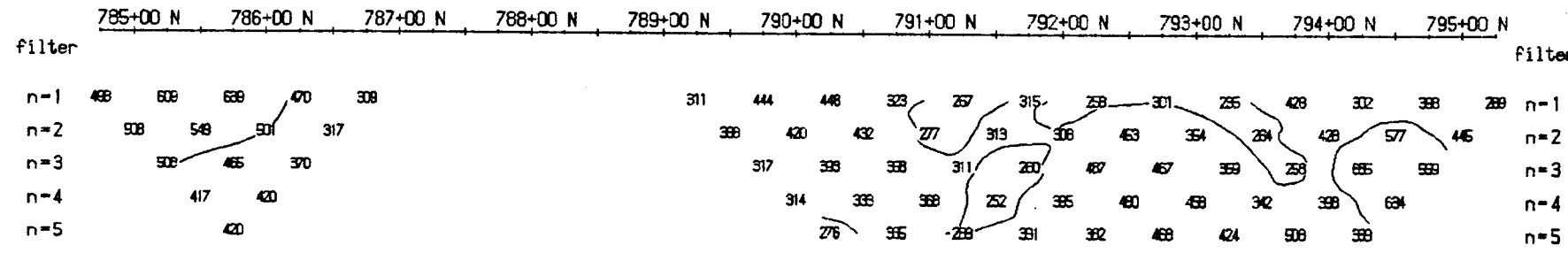
## NORANDA EXPLORATION

### INDUCED POLARIZATION SURVEY

Line 82000 E  
 Mitzi Opiton, Omineca M.D., B.C.

Date: June 1990  
 Interpretation by: L. Bradish  
 Scale 1:2500

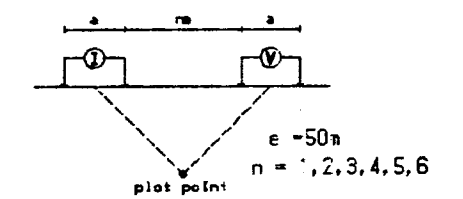
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**20383**

# Line 79200 E

Dipole-Dipole Array



Logarithmic Contours 1, 1.5, 2, 3, 5, 7.5, 10, ...

Instrument : EDA IP 6  
 Frequency : 2s ON / 2s OFF  
 Operator : BC

### INTERPRETATION

- Strong increase in polarization
- Moderate increase in polarization
- Weak increase in polarization

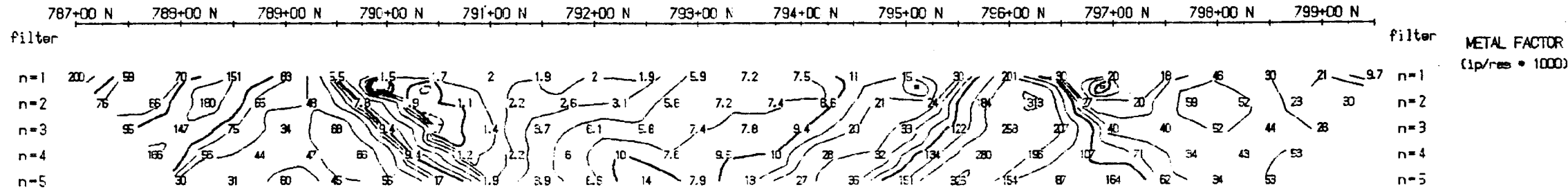
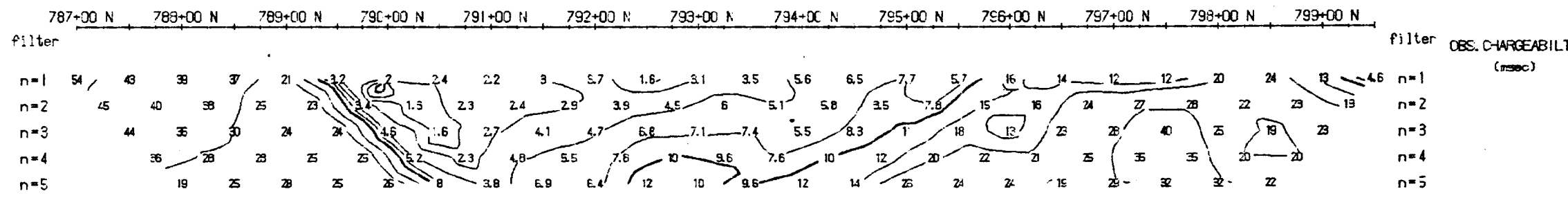
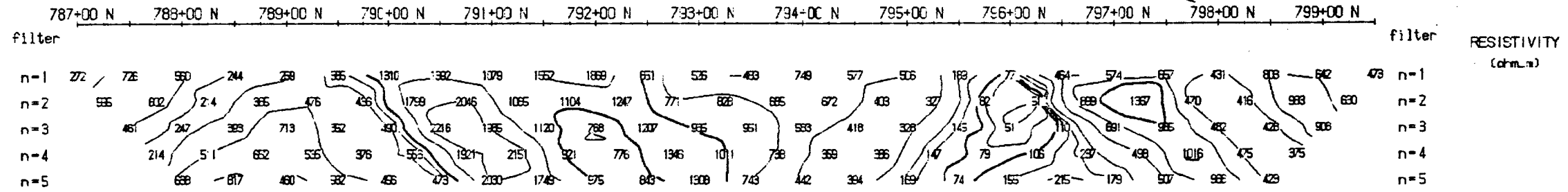
## NORANDA EXPLORATION

### INDUCED POLARIZATION SURVEY

Line 79200 E  
 Mitzi Opiton, Omineca M.D., B.C.

Date: June 1990  
 Interpretation by: L. Bradish  
 Scale 1:5000

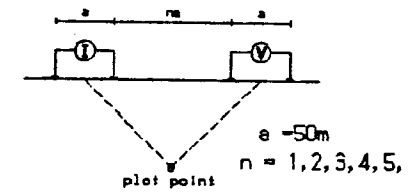
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# 20383

# Line 81200 E

Dipole-Dipole Array



Logarithmic Contours 1, 1.5, 2, 3, 5, 7.5, 10, ...

Instrument : EDA : P 6  
 Frequency : 2s ON / 2s OFF  
 Operator : BC

### INTERPRETATION

- Strong increase in polarization
- Moderate increase in polarization
- Weak increase in polarization

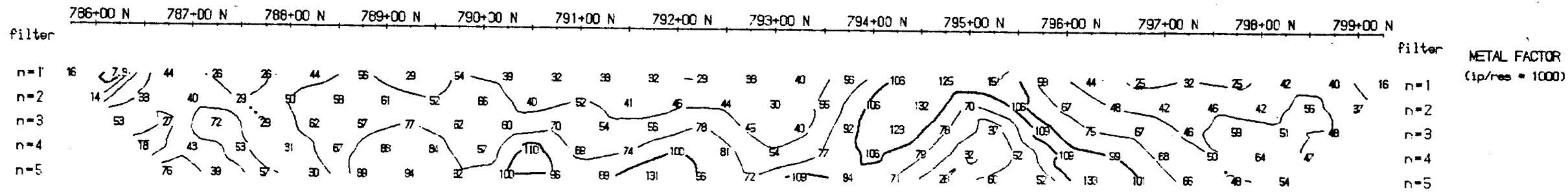
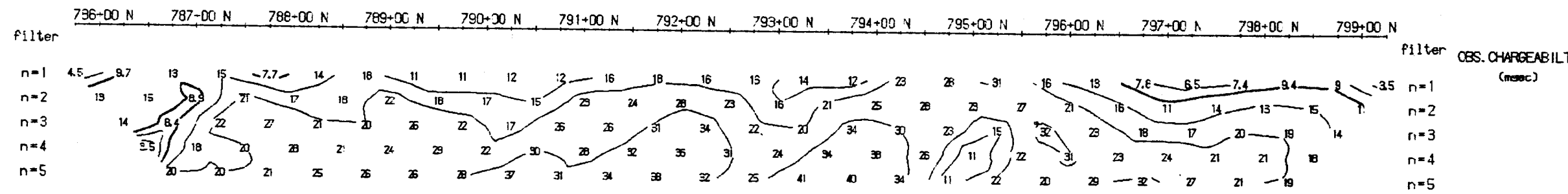
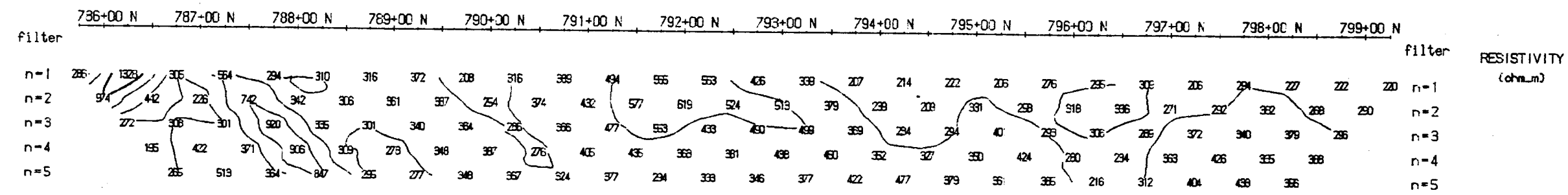
## NORANDA EXPLORATION

### INDUCED POLARIZATION SURVEY

Line 81200 E  
 Mitzi Opiton, Omineca M.D., B.C.

Date: June 1990  
 Interpretation by: L. Bradish  
 Scale 1:2500

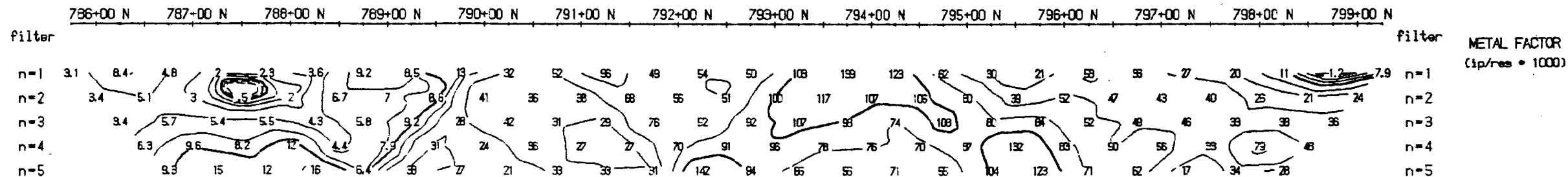
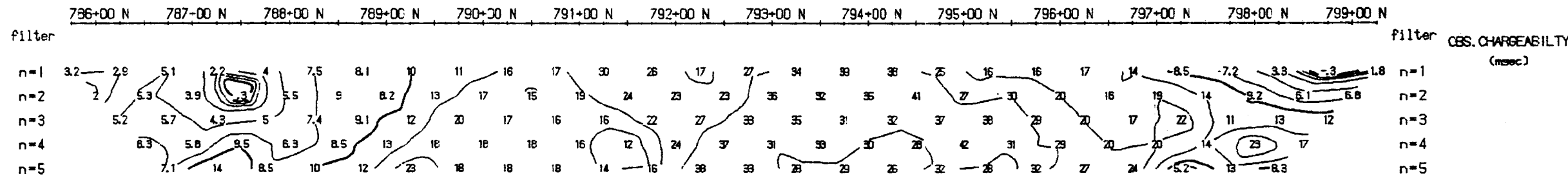
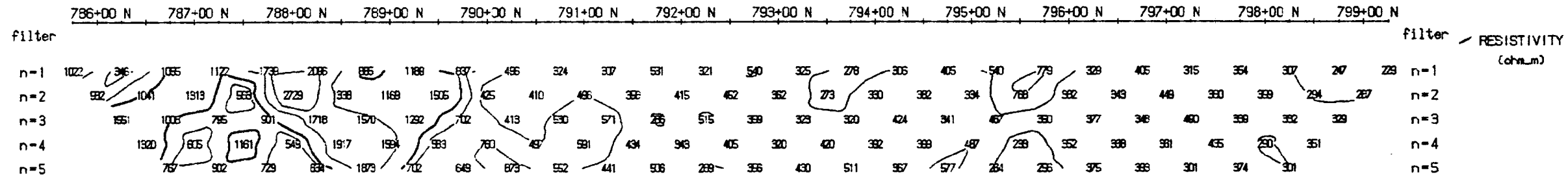
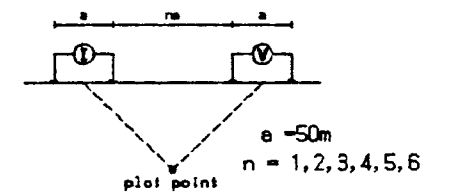
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# 20383

# Line 80400 E

Dipole-Dipole Array



Logarithmic Contours 1, 1.5, 2, 3, 5, 7.5, 10, ...

Instrument : EDA IP 6  
Frequency : 2s ON / 2s OFF  
Operator : BC

### INTERPRETATION

- Strong increase in polarization
- Moderate increase in polarization
- Weak increase in polarization

## NORANDA EXPLORATION

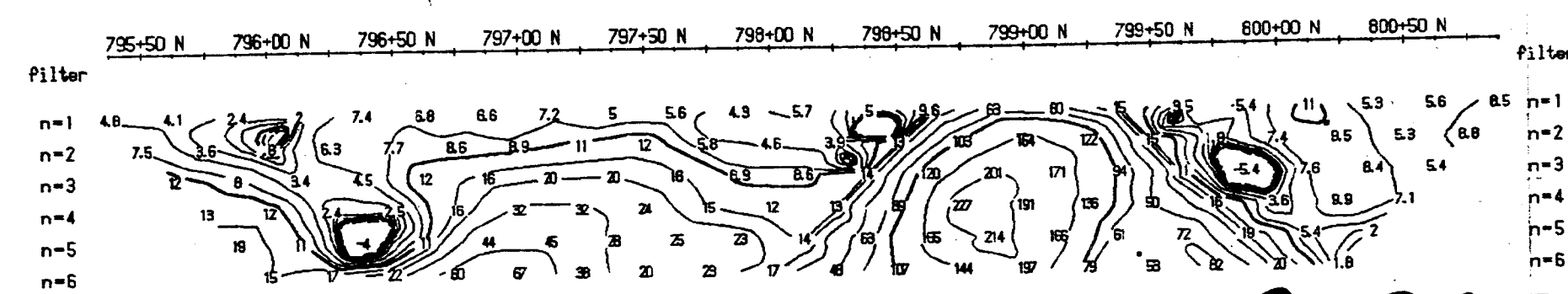
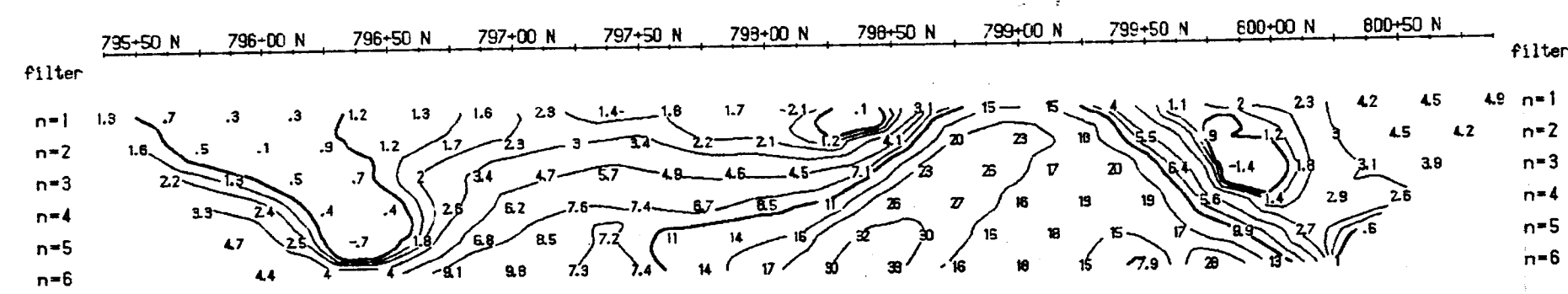
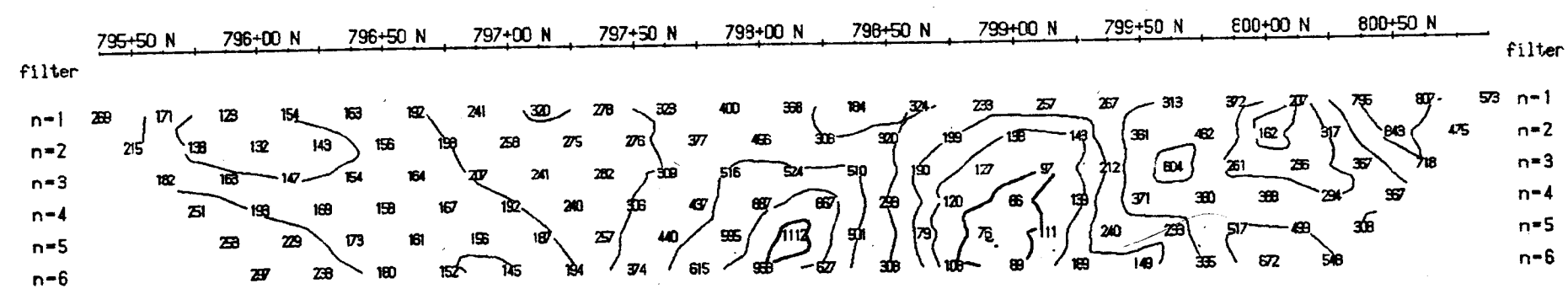
### INDUCED POLARIZATION SURVEY

Line 80400 E  
Mitzi Opiton, Omineca M.D., B.C.

Date: June 1990  
Interpretation by: L. Bradist  
Scale 1:5000

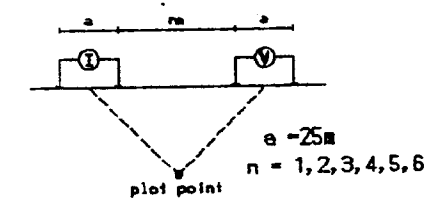
Pacific Geophysical

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### Line 79600 E

Dipole-Dipole Array



Logarithmic Contours 1, 1.5, 2, 3, 5, 7.5, 10, ...

Instrument : EDA IP 6  
Frequency : 2s ON / 2s OFF  
Operator : BC

#### INTERPRETATION

- Strong increase in polarization
- Moderate increase in polarization
- Weak increase in polarization

### NORANDA EXPLORATION

### INDUCED POLARIZATION SURVEY

Line 79600 E  
Mitzi Opiton, Omineca M.D., B.C.

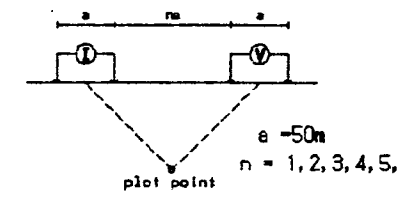
Date: June 1990  
Interpretation by: L. Bradish  
Scale 1:5000

Pacific Geophysical

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# Line 81600 E

Dipole-Dipole Array



Logarithmic Contours 1, 1.5, 2, 3, 5, 7.5, 10, ...

Instrument : EDA IP 6  
 Frequency : 2s ON / 2s OFF  
 Operator : BC

### INTERPRETATION

- Strong increase in polarization
- Moderate increase in polarization
- Weak increase in polarization

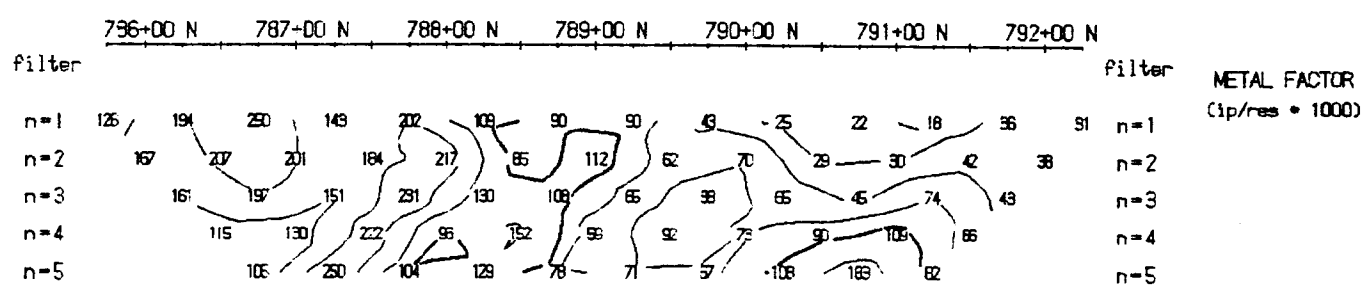
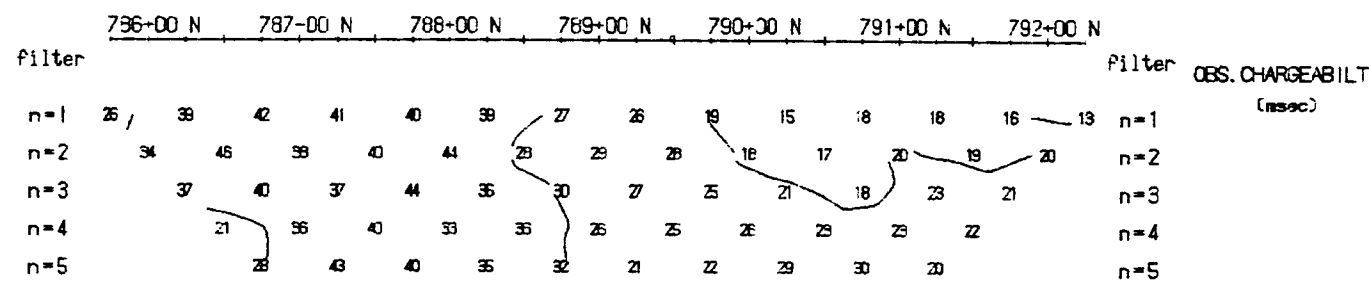
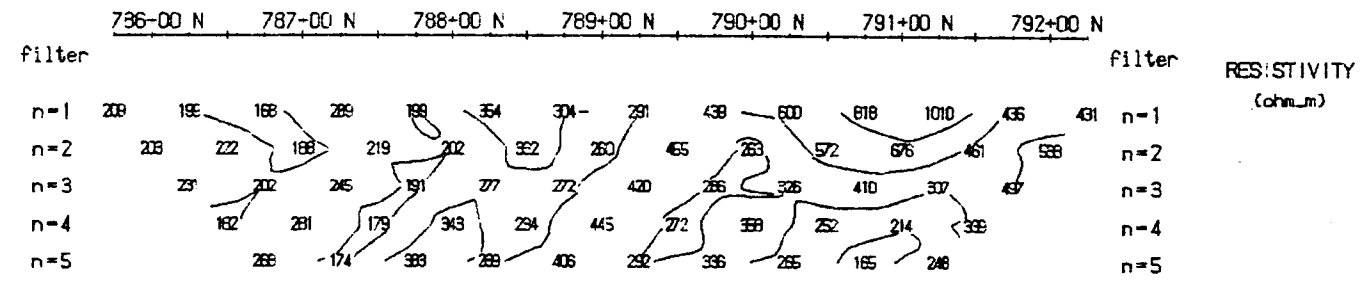
## NORANDA EXPLORATION

### INDUCED POLARIZATION SURVEY

Line 81600 E  
 Mitzi Opiton, Omineca M.D., B.C.

Date: June 1993  
 Interpretation by: L. Bradish  
 Scale 1:2500

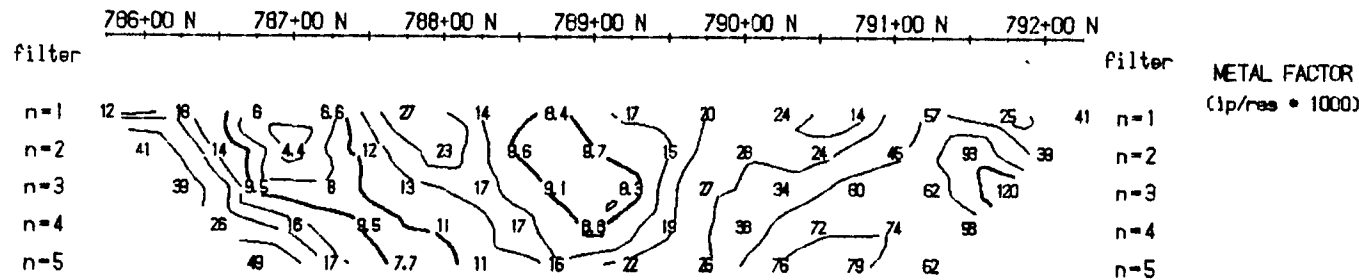
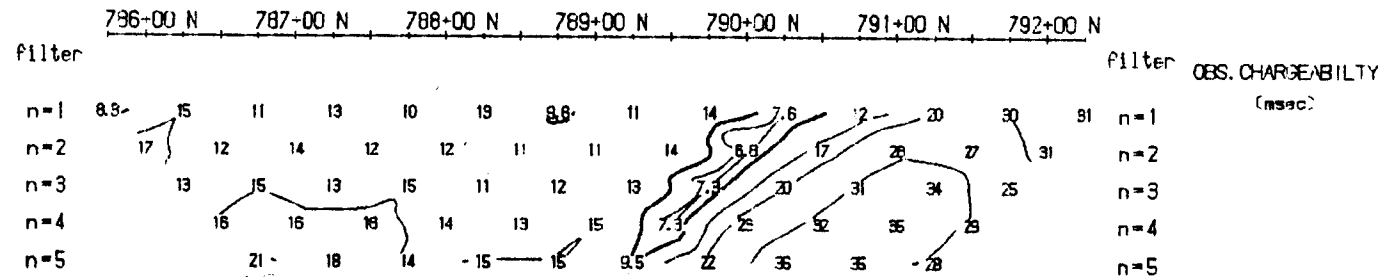
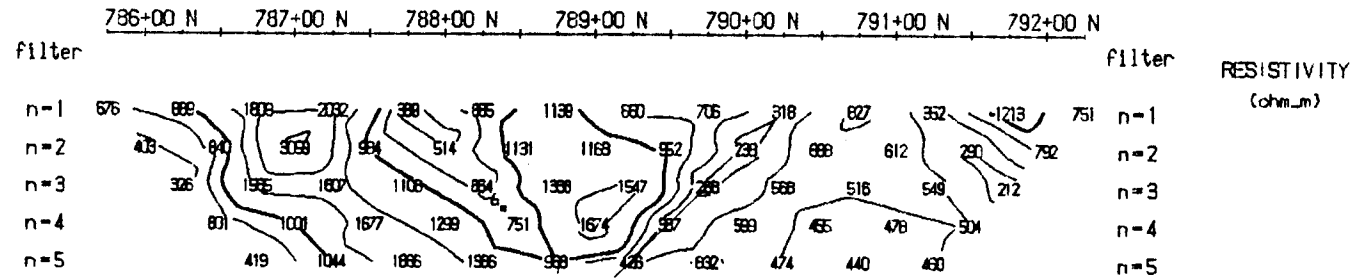
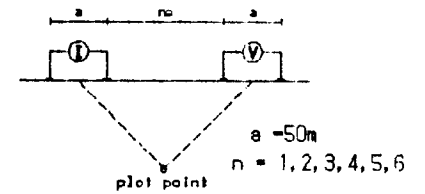
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# Line 80800 E

Dipole-Dipole Array



Logarithmic Contours 1, 1.5, 2, 3, 5, 7.5, 10, ...

Instrument : EDA IP 6  
Frequency : 2s ON / 2s OFF  
Operator : BC

### INTERPRETATION

- Strong increase in polarization
- Moderate increase in polarization
- Weak increase in polarization

NORANDA EXPLORATION

INDUCED POLARIZATION SURVEY

Line 80800 E  
Mitzi Opiton, Omineca M.D., B.C.

Date: June 1990  
Interpretation by: L. Bradish  
Scale 1:5000

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